

STATE OF MONTANA
BUREAU OF MINES AND GEOLOGY
U. M. Sahinen, Director

PROCEEDINGS AND RECOMMENDATIONS
OF THE
1970 GOVERNOR'S CONFERENCE ON MINED-LAND
RECLAMATION AND MONTANA MINING LAW

Compiled by S. L. Groff

Montana Bureau of Mines and Geology

MEMBERS OF THE CONFERENCE COMMITTEE

Senator Gordon McGowan, Chairman
Senator Glen Rugg, Member
Senator Harry Mitchell, Member
Representative B. J. Jordan, Member
Representative Miles Romney, Member
Dr. S. L. Groff, Executive Secretary

MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY
Butte, Montana
December 1970

Errata

Mr. Bernfeld has testimony beginning on pages 24, 65, and 95, and because of the length of his testimony he was asked to edit his remarks and did so.

Difficulties in transcription resulted in the loss of a short amount of the record following the last statement by Mr. Gwynn on page 78.

Other errata may be discovered later.

STATE OF MONTANA
BUREAU OF MINES AND GEOLOGY
U. M. Sahinen, Director

PROCEEDINGS AND RECOMMENDATIONS
OF THE
1970 GOVERNOR'S CONFERENCE ON MINED-LAND
RECLAMATION AND MONTANA MINING LAW

Compiled by S. L. Groff

Montana Bureau of Mines and Geology

MEMBERS OF THE CONFERENCE COMMITTEE

Senator Gordon McGowan, Chairman
Senator Glen Rugg, Member
Senator Harry Mitchell, Member
Representative B. J. Jordan, Member
Representative Miles Romney, Member
Dr. S. L. Groff, Executive Secretary

MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY
Butte, Montana
December 1970

CONTENTS

Conference opens.	1
Dr. S. L. Groff	2
Mr. Ed. Zaidlicz	4
Mr. Bob Manchester	7
Mr. Myron Saltmarsh	11
Senator Bill Mackay	14
Mr. Robert Garwood	15
Mr. Don Aldrich	19
Mr. Seymour S. Bernfeld	24
Mr. Mons Teigen	35
Mr. Dick Hodder	37
Mr. Ted Schwinden	38
Dr. Arnold J. Silverman	41
Representative Vic East	49
Mr. Leonard Lively	52
Mr. C. P. Davenport	55
Mr. Lloyd Ernst	57
Mr. Ron Guse	60
Second day of conference	70
Mr. Thomas Gwynn	70
Mr. Ernest Thurlow	78
Dr. Will Clark	82
Mr. John Hinaman	93
Mrs. Marion Cole	99
Adjournment	102
Appendices	103
1. Additions, deletions, modifications, and options to the committee recommendations	103
2. Notes on the executive session of October 6, 1970	106
3. Semifinal recommendations related to Montana mining law	107
4. Summary of minutes of the November 30 meeting	110
5. Statement of Superior Mining Company	113
6. Statement of Montana Fish and Game Commission	117
7. Statement of Montana Water Resources Board	120
8. Statement of The Anaconda Company	122
9. Statement of the Carter Oil Company	126
List of Registrants	131

PROCEEDINGS AND RECOMMENDATIONS
OF THE
1970 GOVERNOR'S CONFERENCE ON MINED-LAND
RECLAMATION AND MONTANA MINING LAW

October 5 - 6, 1970, Helena, Montana

The conference was opened by the Chairman, Senator Gordon McGowan, at 10 a.m.

THE CHAIRMAN. Let us come to order. We are now in session. This hearing is a continuation of the one held in these (Senate) chambers last year. Some of you were not here last year and are not acquainted with the members of our committee.

(The committee was then introduced, including the executive secretary.)

One other member has not arrived. He is Senator Glen Rugg, and I expect he is having difficulty with the airlines.

I wish to welcome all of you. The purpose of this conference and the one last fall, as you may know, is to try to draw the various segments of Montanans into areas of agreement whereby we can have development and at the same time preserve our land, air, and water. The financial situation in Montana is rather grim. We must have some way of adding to our tax base, provided we can do it without destroying our environment.

The yellow book (1969 Proceedings) which most of you have contains the Governor's first letter, in which he expresses the hope that some continuity may be acquired by our various groups and interests. I think we have moved in that direction, and I hope that we will be able to accomplish more in the future.

The Governor asked me to thank all of you for attending and expressed the hope that we may sit as reasonable persons and work for the welfare of the State of Montana.

Guidelines for testimony are on pages 59-61 of the yellow book. We hope they will be followed. We will do everything in our power to hear you, and I think we will give priority to the citizen who comes here on his own time and expense.

At this time I will ask Dr. Groff to briefly explain the extra sheets which have been handed out. Oh, yes, the people who connected up the PA system only hooked in one microphone; we will have to pass it around from witness to committee member. I should mention that the procedures and ground rules will be the same as they were last November--committee members may question witnesses, but witnesses will not examine witnesses. Okay, Sid.

DR. S. L. GROFF. Thank you, Mr. Chairman. Ladies and Gentlemen. I am a bit weak from being in the hospital. If you can't hear me, please raise your hand.

Since last year's hearing, the report of the Public Land Law Review Commission has been completed. I have a copy of that report but have not had time to go through it in any detail. Further, due to illness, I have been unable to follow through on the Chairman's request for a revision of the recommendations to be mailed out to the committee and to you people who were sent invitational letters. I will rather quickly discuss the various points, for some of you may wish to modify your testimony or comment on the ideas given in these latest recommendations.

Recommendation A (see Appendix): This is based on the report of the Public Land Law Review Commission and relates to a new type of filing on mineral claims. The new system would allow a prospector or company to hold the ground for up to two years. The most modern and sophisticated exploration methods would be permitted. The advantage of such a system relates to the fact that if a commercial ore deposit is found, then it can be filed on under the existing system, but if the deposit is noncommercial, then the area would be abandoned with little evidence that mineral exploration had ever taken place.

The recommendation suggests going beyond the present permissive limits of federal law, in that the state would by statute allow a mineral area, claim, or group of claims to be temporarily located and held for a period of two years on the basis of geological, geochemical, or geophysical evidence of the existence of a promising mineral deposit.

Recommendation B: This relates to our previous recommendation relating to a valid filing based on the actual mineral assay entered on the Notice of Location. This is legally questionable, and we suggest it be deleted.

Recommendation C: This relates to part 4 of Recommendation 1 in the yellow book, which in turn relates to bulldozing. There are two options

concerning bulldozing: (1) the intent of the legislature is to discourage indiscriminate bulldozing, and (2) that bulldozing might be done on permit basis under the aegis of the Montana Bureau of Mines and Geology. The Bureau of Mines and Geology is compelled to ask rejection or deletion of the latter option. The Bureau seeks no police or administrative powers, for we (the Bureau) prefer to be in a position whereby unbiased opinion and technical consultation can be provided as needed by the state.

There is considerable opinion that removal of the legal necessity for excavation should largely take care of the problem.

Recommendation D: This relates to our recommendation concerning annual assessment work and reporting. This recommendation (p. 60, yellow book) is merely modified to read: "To amend the Montana Mining Law to provide that failure to file an annual affidavit of assessment work within six months after the close of the assessment year is prima facie evidence of intent to abandon." Note that the phraseology related to "open for relocation" has been dropped--this is considered a moot point of law, and we certainly do not want to take it too far.

Recommendation E: This relates to the Dredge Mining and Land Preservation Act, and I'm sure that some of you will find it (the recommendation) controversial. General opinion from many sources is that this act should be simplified and incorporated into the proposed Surface Mined-Land Reclamation Act. A practical concept here is that reclamation of dredge-mined areas is in reality surface mined-land reclamation. Dredging is a sand and gravel operation; therefore, with a couple of special provisions it would fit in the reclamation act without any legal problem.

Recommendation F: The Surface Mined-Land Reclamation Act. The question as to who constituted landowners was brought to my attention. I suggest changing "needs of the landowners" (p. 60, sec. 1) to "best interests of the state."

Relative to the 10,000 cubic yard figure (sec. 3), it is realized that this is an area which has not yet been resolved, and it is hoped that suggestions will be forthcoming from industry. Also, in connection with the mineral commodities covered by the act, the word "gravel" should be changed to "sand and gravel," as in a general sense most dredging operations are a sand and gravel operation.

In sec. 4, the committee recommends that the State Land Commissioner be the administrator of the Surface Mined-Land Reclamation Act. Subsequent to last year's hearing, many pro and con comments were received. Many wanted another agency. Some wanted the Fish and Game Department, others favored the Soil and Water Conservation Districts or the Railroad Commission, and many expressed a desire that the Bureau of Mines and Geology remain as

administrator. I must say immediately that the Bureau is not in a position to remain as administrator. The Bureau is a public service, research, and technical consulting department of the University System, and really should have no administrative or police duties.

In order to do the best job, it is suggested that a qualified expert be established as administrator and that he be employed on a contract basis so as to be free of partisan political pressures. At this time there appears two ways that this could be accomplished: (1) legislative authorization for the Land Board to employ such a person on contract basis and to establish his office in connection with, but not subordinate to, the Commissioner of State Lands, and (2) possibly to authorize Montana State University at Bozeman to establish a chair in mined-land reclamation. The professor could then be loaned to the administration for the purpose of administering the act. There may be objections to these options, but there is a feeling that such a position should not be filled with a political appointee. It should be free of partisan political pressure and must insure continuity of reasonable policies.

In sec. 5 (p. 60) we have recommended seven members for the Advisory, Repeal, and Review Council. This could be considered rather large and cumbersome. As an alternative it is suggested that if we went the route of a qualified expert, a council membership of three might be sufficient. These members could be the Commissioner of State Lands, the Director of the Department of Planning and Economic Development, and the State Forester. This suggestion is not made with the thought of cutting anyone out, but all agencies should realize that a rather considerable amount of work may be involved. Frankly, the situation may be gaged on the basis of the more agencies, the more work. If the three-member council were to be approved, then all member agencies of the Governor's Natural Resources Council (to include the Bureau of Mines and Geology) would be designated advisors. In addition, the Montana Agricultural Experiment Station, the U. S. Bureau of Land Management, the U. S. Forest Service, and the U. S. Geological Survey would also be advisors.

Sec. 8 (p. 61) relates to regulations on the reclamation plan. I believe we are open to suggestions from federal agencies and industrial representatives.

That takes care of the new recommendations. Some of you may include comments in your statements. Thank you, Mr. Chairman.

THE CHAIRMAN. Thank you, Sid. If there are no questions on the explanation that you just heard, we will call for statements. The first on my list is Ed Zaidlicz, state director of the Bureau of Land Management. Ed, would you please come up here where the microphone is available.

ED ZAIDLICZ: I am Ed Zaidlicz, state director for the Bureau of Land Management, with headquarters in Billings. My comments will be brief; however, I want to express my appreciation for the opportunity to attend this

conference and to offer my encouragement to this committee in its study of this important activity. Your recommendations, subsequent legislation, and actions taken by the State of Montana, as the result of your study will have an effect on the future activities of the Bureau of Land Management.

It is the intention of our office to cooperate in every way possible with the State of Montana in the optimal development of our mineral resources. Our relationship in the past concerning mineral resource matters has been mainly with the Montana Bureau of Mines and Geology. Currently we are also working with the Natural Resources Council and other resource management agencies of the state. Our relationship has been most productive, and we desire to continue with this level of cooperation.

It is in that spirit, then, that I offer the following comments to the recommendations outlined in the Proceedings of your 1969 conference:

Recommendation I has great merit. We urge that serious consideration be given to the elimination of the requirement from state law that a stated volume of earth must be removed to expose a discovery. This requirement has often resulted in unnecessary surface damage. While the exposure of a discovery is necessary to meet the validity test for a mining location, it should be accomplished with a minimum of surface damage. We agree wholeheartedly that indiscriminate bulldozer and other machine exploration excavations which are in excess of that necessary for reasonable prospecting and exploration needs should be discouraged.

We concur in Recommendation II where it proposes to make mandatory the filing of annual assessment work affidavits. This would provide greater protection to the claimant in maintaining his possessory title. We note that the proposed amendment as to geological, geophysical, and geochemical surveys parallels existing federal law.

Recommendation III concerns the amount of time allowed for recording an affidavit of annual assessment work. We believe the purpose of the recording should be to inform all concerned that the required annual work has been done. We do not believe that failure to record, in itself, is sufficient to sustain a charge of abandonment. We agree with the proposal to make recording of annual assessment work mandatory, but we recommend a period much shorter than 6 months to further full resource development.

We have no specific comment on Recommendation IV, which relates to the Dredge Mining and Land Preservation Act. We do believe there is great need to protect other resources and to rehabilitate the disturbed surface during and following dredge mining activity.

The Bureau of Land Management endorses the basic theme of Recommendation V, which is to the effect that the disturbed surface

accompanying the mining of such minerals as coal and phosphate must be reclaimed as far as it is reasonably possible to do so.

With one exception, it does not appear appropriate to comment in detail on this subject at this time in view of the in-depth discussions now underway between the State of Montana, the state office of the Bureau of Land Management, and the northern region of the Forest Service. It is the purpose of these discussions to arrive at uniform surface-reclamation requirements for both state and federal mineral leasing activity.

We do have one specific comment on Recommendation V, and that is to delete item 3, which states in effect that no surface reclamation would be required unless 10,000 cubic yards or more of mineral product shall be mined. In the case of very thin overburden and thin-bedded mineral deposits, a significant surface area might be disturbed before 10,000 cubic yards of product are extracted.

We recommend that a surface reclamation contract be required where any significant disturbance of the surface occurs. The agency administering the lease should make the decision whether a reclamation contract is necessary.

This concludes my statement. We appreciate the invitation to appear before you and present our views on this most important subject.

I have Mr. Parker Davies with me to assist in answering any technical questions you may have. Parker is chief of the Mineral Branch in our office.

QUESTIONS:

REPRESENTATIVE ROMNEY. Mr. Zaidlicz, as an administrator in your department, have you ever experienced trouble by discovering after the fact that people have bulldozed and torn up the earth in an effort to establish mineral claims? If this is the case, under the present system of handling mining claims, would it not be wise, in your opinion, to legally establish a definite procedure whereby anyone going in to explore land would have to manifest a notice to you?

MR. ZAIDLICZ. Yes, there is little question about that from the standpoint of the administration. It would be a big aid to us. As far as the law is concerned, I am not certain that we can require this but it would be an aid and would help.

REPRESENTATIVE ROMNEY. I understand the Forest Service has this trouble--no notice, and people come in and do the work. For example, two such instances have taken place recently in Ravalli County. When I talked with the Bitterroot National Forest Supervisor, he advised that these two instances had not come to his prior notice.

MR. ZAIDLICZ. There is no question about it. There is a problem.

SENATOR MITCHELL. Relative to the discussions between the various state and federal agencies on this subject, what progress has been made? Do you have any kind of timetable? The public and those of us who are concerned would like to find out what is going on.

MR. ZAIDLICZ. Actually, Senator, I am not certain I can answer that. The time schedule is pretty much in the hands of the state people. The Forest Service and the Bureau of Land Management are working with these fellows. I think we are getting a blueprint laid out that will be very meaningful. It is most helpful not only to the federal agencies, but to the mining industry and to the state as well. I'm not sure just when these findings or plans will be laid out. The way I look at it, the Bureau of Land Management and the Forest Service are pretty much in a cooperative role in this work. I think we will get something out of this where there will be little uncertainty between the different agencies that are involved in surface management problems.

THE CHAIRMAN. Thank you, Ed, for a fine statement. In Montana we have state land intermingled with federal land, and whatever the guideline rules and regulations, the State of Montana and the federal government should be functioning in similar fashion. I do not believe we will have any trouble in reaching this type of agreement. Whether on state or federal land, we must operate under uniform guidelines. Without such uniform guidelines we will have trouble all the way.

One thing I forgot to mention earlier relates to this committee's efforts to get their feet on the ground and get a better understanding of what we are considering here. In July we arranged for a National Guard plane, and the committee, with about 20 other legislators from both the House and Senate, Democrats and Republicans, visited North Dakota, where a day was spent in looking over the Knife River Coal Company's operation and their reclamation, and also the Basin Electric generation plant and reclamation work. The following day was spent at Colstrip, Montana, where we viewed the Western Energy and Peabody operations and took a firsthand look at the Montana Agricultural Experiment Station's reclamation research project. The third and final day was at Butte, where we observed and found out how the coal-resource inventory was handled at Montana Tech. That afternoon we toured the Berkeley Pit and the concentration plant. It was enlightening to all of us, and while many had ideas in one way or another, I think everyone changed in some degree.

I would like now to call on Mr. Bob Manchester of the Forest Service.

BOB MANCHESTER. It is a pleasure to have the opportunity to appear again before this committee for comment on the recommendations the committee has proposed. The following remarks are directed specifically to the recommendations:

Recommendation I. Item 1. We consider this to be a very sound proposal and recommend legislative changes for the elimination of the now mandatory discovery pit requirement.

Item 2. We do not see where this would serve any real values, as the test for a valid discovery is the prudent man test, coupled with marketability for nonmetallics. A high or low assay value alone does not determine the validity of a discovery under the federal mining laws.

Item 3a. Under federal law, a physical exposure of the discovery is a requirement before any right is established for a mineral location. We believe the most desirable "how" is the method which the miner uses that results in the least surface disturbance.

Item 3b. We concur with this recommendation and suggest that the enforcement agency work closely with the agency responsible for administering the land, if it is in public ownership or with private landowner, whichever the case may be.

Item 4. We certainly urge every effort be made for controlling indiscriminate bulldozer prospecting and building roads where they serve very little or no purpose. Your committee may wish to consider legislative changes which would condition the use of bulldozers and other similar heavy equipment upon authorization of the landowner or the administrator having jurisdiction over the land. We believe that such equipment should be used only where it is actually needed and where it serves real benefit.

As it stands now, some prospectors from the mining industry are abusing the privileges they have enjoyed over the past 100 years through excessive use of equipment. The use of bulldozers and other similar equipment should be correlated with the other resource values to insure the maximum protection of the surface.

We do not share the opinion that the elimination of the discovery pit requirement will remove all the problems now found with the use of bulldozers. Much of the real damage occurs in the name of annual representation work which is positively required.

Recommendation II. We concur with the committee's thinking with respect to urging prospectors to utilize geological, geochemical, and geophysical surveys for assessment work and to amend the state law so as to permit this. Such work generally results in minimum surface damage and serves a real purpose.

Individuals and companies, however, are usually reluctant to disclose the basic findings as is required in (c) and thus work against acceptance of this practice.

Recommendation III. We concur with this recommendation and believe that a legislative change along this line would serve real value and eliminate many of the now old and apparently abandoned claims.

Recommendation IV. We are in agreement that a general surface mined-land reclamation act is needed which would cover all surface mining from dredging through strip mining and also provide for reclamation of lands after mining. The enforcement agency for any such legislation would have to coordinate closely with the land-managing agency or the private owner, whichever the case may be.

Recommendation V.

(1) We agree with your recommendation as stated.

(2) We would agree with this recommendation so long as item (1) is in effect.

(3) We believe that any commercial surface mining should require a provision for reclamation.

(4 and 5) No comment.

(6 and 7) We believe that the administration will need to coordinate rules and regulations with the federal agencies who also have standards and requirements with respect to certain minerals and certain types of lands.

(8) No comment.

(9g) This appears very necessary and one that will require close coordination between agencies.

(10) The performance bond should be in line with the amount of surface disturbed and not limited to any set range.

(11 and 12) No comment.

QUESTIONS:

REPRESENTATIVE ROMNEY. Mr. Manchester, I presume you heard questions of the previous witness.

MR. MANCHESTER. Yes, I did, sir.

REPRESENTATIVE ROMNEY. Do you feel the same way as he did?

MR. MANCHESTER. Yes, I certainly do.

REPRESENTATIVE ROMNEY. You have the same situation, not only in the matter of mineral claims, but you in the Forest Service have had an occasion to see land molested by construction of long bulldozer roads through the public domain. You have the same trouble there that you had with the claims, and they (roads) are often made prior to the time the claims are established. Is that correct?

MR. MANCHESTER. That is true; however, there are instances where the individual or company would come in and apply for a permit to reach a certain area. This can be worked out with a special use permit and is quite satisfactory where the miner does come in--in advance of his planned mine operation.

REPRESENTATIVE ROMNEY. But if changes are made to eliminate the bulldozer, this would be pretty (useful) too?

MR. MANCHESTER. We certainly do not recommend prohibition of the bulldozer. We believe it should be integrated with other uses. If the miner needs access to some area, he could come in and apply for a permit which would allow us to work out a route for his access. If the dozer work is necessary, this is agreeable, where it can be worked out with the other land uses.

REPRESENTATIVE ROMNEY. You feel perhaps then that it is mandatory that the miner does make an application for a special use permit prior to engaging in exploration.

MR. MANCHESTER. It would really be helpful if we knew this was going to occur. We would urge that it would be mandatory.

REPRESENTATIVE ROMNEY. You'd like to see that embodied in the law?

MR. MANCHESTER. Yes, we would. We made a recommendation along this line, for the state to go this direction.

REPRESENTATIVE JORDAN. Mr. Manchester, in reference to your comments on Recommendation IV, when you mentioned the word "reclamation," I believe your statement is that it should cover all surface, dredge, and strip mining, and provide reclamation of land after mining. Could you define reclamation for me?

MR. MANCHESTER. Reclamation would be putting land back into useful purpose--some useful purpose. Yes, where it would best serve the public.

REPRESENTATIVE JORDAN. Mr. Manchester, relative to the performance bond, you said the performance bond should be in line with amount of surface disturbed and not limited to any certain range. Tell me, sir, how would you arrive at a value in determining the amount of bond that would be necessary?

MR. MANCHESTER. This would depend on the amount of land that had to be brought back into use. We believe that in some cases the

bonding requirement might be less (per acre); in other cases it may be more, depending on the type of land and the type of reclamation necessary. Factors to consider are the depth of mining, surface area, and overburden, but a set range per acre does not appear realistic.

REPRESENTATIVE JORDAN. Along this line, would you say that reclamation has to remain for a useful purpose? Is the bond to be estimated on that premise?

MR. MANCHESTER. Yes, sir, it would be.

THE CHAIRMAN. Any further questions? Mr. Myron Saltmarsh of the Bureau of Indian Affairs.

MYRON SALTMARSH. Mr. Chairman, Members of the Committee, Ladies and Gentlemen. I am a realty specialist with the Bureau of Indian Affairs in Billings, Montana. Our Bureau policy goes hand-in-hand with state policy on the development of coal policies, as stated in the Montana statutes. It goes just as well with mine-owner land reclamation policies in this state. In short, your goals and ours are consistent with the development and reclamation of Montana minerals acts.

As you know, there are approximately 5 million acres of Indian land in Montana. Since the labor force, the transportation system, and the available water supplies will all feel the impact of current events, we feel the development of reclamation practice employed on Indian land should be in concert with those of the state and the region.

Last year Rep. Jordan commented on the desirability of a reclamation commitment prior to actual mining. At that same time our area realty officer, Mr. Gray, reported to you that new regulations had been formulated by the Department of the Interior and Bureau of Personnel on Landowner Land Reclamation. These regulations may be found in 25 CFR 177. They do require the submission of a written operation and reclamation plan prior to any surface disturbing activity. I should point out here that perhaps our procedure is just a little bit different than on state lands. We have people come in for a 2-year period for prospecting, with an option for 2 years more at the completion. At any time during this 4-year period they may go to lease. The lease will last for 10 years, or as long thereafter as minerals are produced in paying quantities.

Our experience with energy companies has lead us to believe that they are serious about this sort of reclamation and that they would invite(?) some rather firm guidelines. The toughest problem, of course, was to get the kind of reclamation desired by the Indians and the public, and to do so while being fair to large and small operators alike. It is hard to be practical in some instances without being punitive. Mr. Gray also told

you a year ago that, due to the newness of our regulations, he was unable to comment on their effectiveness or reception by industry. This is still true in large part, though we have one major coal company who has now gone to lease on the Northern Cheyenne Reservation. As we have reported, they have no problem with our reclamation requirements. Another major company is going to lease with us next year, and they have advised that they see nothing objectionable at this time. We have been informed that industry in the southwest has responded with unexpected enthusiasm.

We think our regulations have sufficient administrative flexibility to guarantee effective balanced reclamation under a wide variety of conditions. This includes large, long-term contracts where the conditions are bound to change during the lifetime of the lease. We are more confident this year that we are on the right track to the kind of reclamation and ecological protection that we all want.

The Bureau of Indian Affairs appreciates this opportunity to participate in conferences of this nature. We welcome the opportunity to learn from your thinking and experience and to share it with you.

QUESTIONS:

REPRESENTATIVE ROMNEY. I would like to inquire if you have written into your lease specific methods and conditions for the reclamation of the land molested.

MR. SALTMARSH. Yes, sir, we do. The regional supervisor and the superintendent of the pertinent reservation work out the reclamation needs for a given lease. These will be incorporated as part of the lease.

REPRESENTATIVE ROMNEY. Would it be possible for you to send a sample copy of such a lease to the committee secretary?

MR. SALTMARSH. We will be able to provide a copy of the Northern Cheyenne lease as soon as it has been officially signed and approved.

REPRESENTATIVE ROMNEY. You anticipate that, when?

MR. SALTMARSH. It should be any time. The agreements have been made, and they only have to be signed and processed.

REPRESENTATIVE JORDAN. Can you tell us whether all such lease agreements are identical, or will there be variances?

MR. SALTMARSH. They will vary with each lease, because they are all different in some respects. Yes, they will all be different; the lease will be tailormade for the particular operation.

REPRESENTATIVE JORDAN. Thus, one particular lease agreement would not necessarily be germane to all of your coal leasing operations?

MR. SALTMARSH. No, we must have the flexibility to change for each lease.

THE CHAIRMAN. Would you explain a little further, please, on the reasoning behind the fact that all your leases cannot be the same. I think maybe some of the people here would appreciate it.

MR. SALTMARSH. Our reclamation regulations were not designed for coal alone; they are for almost all types of mineral operation. This being the case, various categories of land may be involved, some in the mountains and some on the plains for strip mining, and the regulations have to be flexible so they can be adapted to whatever mineral is involved. They were designed strictly for coal--almost everything except oil and gas.

REPRESENTATIVE ROMNEY. Is there any method within your power to insist that a person or corporation holding a lease must live up to the terms of the lease? If so, and if they fail to comply with these terms, what remedy do you possess?

MR. SALTMARSH. If they do not live up to the terms of the lease, the lease can be canceled on given notice and hearing.

REPRESENTATIVE ROMNEY. Then what happens to the disturbed land that caused cancellation of the lease? Who would take care of that?

MR. SALTMARSH. We have never had this situation, but we would charge them with reclaiming any lands that they had disturbed at that point. The experience we have had with mineral companies to this time shows they have gone overboard to cooperate with us in every way. We are very happy with them.

REPRESENTATIVE ROMNEY. We always hope that will be the case, but we can't look into the future and be positive that will be the situation. So we have to guard against that someone who may be a malefactor.

MR. SALTMARSH. That is true. I'm happy to say, though, that we have not had that experience thus far.

THE CHAIRMAN. Thank you kindly for a fine statement. I will now call Mr. Douglas Smith, the director of the Water Resources Board.

DOUGLAS SMITH. Mr. Chairman, we are prepared to present a statement this afternoon.

THE CHAIRMAN. That is all right. I will call on Senator Bill Mackay from Carbon County, and he would like to leave today. Very nice of you to come, Bill.

SENATOR BILL MACKAY. Mr. Chairman, Members of the Committee. I am Senator Mackay, District 13, Carbon-Stillwater County. I am here to present a resolution passed by the Beartooth Reclamation Association, a small group of concerned citizens in our area. This group is concerned with the activities that are now taking place in the Beartooth-Stillwater area. We are concerned with what is happening to the land surface and with what might happen to the Stillwater River and other streams in that area. Our thinking is set forth briefly in a short resolution which I wish to present.

Whereas the Beartooth Reclamation Association is concerned with the effect of mining exploration on the environment and ecology of the Stillwater Complex;

And whereas the unnecessary disturbance of the land surface has defaced the landscape, causing erosion and the propagation of noxious weeds;

And whereas the present practice of digging exploration holes on each 20-acre tract is an unnecessary process in the mining operation;

And whereas there is no present state law to provide for reasonable and satisfactory reclamation of these mining sites;

Therefore be it resolved that the Beartooth Reclamation Association endorse Recommendations I, II, III, and V as set forth on pages 59, 60, and 61 of the Proceedings and Recommendations of the 1969 Governor's Conference on Mined-Land Reclamation and Montana Mining Law, with the following added suggestions:

1. That subparagraph 3 of Recommendation V include "all ore-bearing rock,"
2. That a time limit on the beginning and completion of the reclamation contract be specified,
3. That the negotiated contract with the Advisory, Review, and Appeal Council contain a provision for the restoration of the pits or discovery holes no longer needed or useful for the mining operation.

And be it further resolved that the Beartooth Reclamation Association be on record as supporting legislation in the implementation of the above-mentioned recommendations.

Mr. Chairman, I would like to further add that Mrs. Mary Donohoe of Nye, Montana, serves as chairman of our association. She is a county

commissioner of Stillwater County, and she and other citizens make up the association.

THE CHAIRMAN. Thank you, Bill. Is there any comment or questions?

QUESTIONS:

THE CHAIRMAN. I have this comment. I have seen this area myself, but according to mail I have received from Mrs. Donohoe, this is certainly something that we should be looking at.

SENATOR MITCHELL. Mr. Chairman, how long is the record going to remain open for comments from the people? What is the deadline for submission of statements to this committee?

THE CHAIRMAN. I don't know that we should establish a deadline; I'm sure you are aware that it takes time to publish a report of the hearing, as we did last year. In view of the fact that the Fish and Game Department is having their meeting on the 14th (October), we will hold it open that long. I don't think we can hold anything after the 20th. A report must be prepared, as well as the framework of the legislation. It will be January 1 before we know it.

REPRESENTATIVE ROMNEY. Will we get a copy of the Fish and Game statement?

THE CHAIRMAN. It will be incorporated in the minutes. Mr. Bob Garwood, are you here? Mr. Garwood is the representative of American Exploration and Mining Company.

ROBERT GARWOOD. Mr. Chairman, my name is Robert Garwood. I am a northwest regional manager for American Exploration and Mining Company. The following statement is presented on behalf of my company.

During the 1969 conference, my company expressed our interest in assisting this committee in its commendable efforts to formulate farsighted policies and laws which will work for the best interest of the public, the mineral industry, and the State of Montana. During the past year our interest in your work has increased, and we hope that this committee will feel free to request our assistance at any time.

American Exploration and Mining Company is in general agreement with the recommendations as listed on pages 59 through 61 of the report on the Proceedings and Recommendations of the 1969 Governor's Conference on Mined-Land Reclamation and Montana Mining Law. We noted that in 1969 there was expressed a general agreement between conservation interests and

industry of the need for cooperation between the groups and that our differences were not as great as we once thought. We sincerely hope that this conference will bring the groups closer together so as to create a lasting and constructive working relationship.

We offer for the committee's review the following comments on the recommendations listed on pages 59-61:

Except for clarification of item 4 of Recommendation I, we are in complete agreement with the recommendation. We suggest that item 4 be clarified to allow use of a bulldozer for road construction or accessibility to a mineralized area. In our opinion, the U. S. Forest Service and other federal agencies provide adequate control of this use of a bulldozer for this purpose. We encourage the need for control of indiscriminate bulldozing and excessive disturbance of the surface of the land.

We are in complete agreement with Recommendation II.

We are in agreement with Recommendation III, but suggest that the length of time to file an Annual Assessment Work Affidavit be 60 days instead of 6 months after the close of the assessment year.

We commend this committee on its efforts to solve the most difficult and controversial problem covered in Recommendation V. We believe that workable and acceptable solutions have been presented. However, if the Advisory, Review, and Appeal Council proposed by this recommendation is to function in the best interests of all the people of the State of Montana, it must be charged with an affirmative duty to consider all aspects of the problems it will be dealing with. We believe that effective utilization of the state's mineral wealth is just as important as protection or restoration of the land's surface.

We accordingly offer to this committee for its consideration the following provision to be incorporated as part of the Act:

The Council, in carrying out its duties under this Act, will, to the fullest extent possible, inquire into and consider all relevant factors, including the economic consequences to the operator and the community of any proposed ruling, recommendation, or reclamation plan or program.

We appreciate the opportunity to appear at this conference to express our views.

QUESTIONS:

REPRESENTATIVE ROMNEY. I observed on page 2 of your statement, top paragraph, a suggestion that item 4 be clarified to allow use of a bulldozer

for road construction for accessibility to a mineralized area. Would you quarrel with the requirement that a special use permit be secured by the mining concern prior to engaging in road construction?

MR. GARWOOD. No, sir, I would not quarrel with it, if there were a provision that consent would not be unrealistically withheld. In other words, there should be a time limit required for any government agency to act after receiving a permit request. Our general practice is to locate our claims and then notify the Forest Service and request their cooperation in road construction, use of the bulldozer, and other heavy equipment we will have in the area.

REPRESENTATIVE ROMNEY. Take a hypothetical situation: A road has been constructed into the public domain to a mine for exploration purposes. After the exploration work has been completed, it is found the mine is not valuable, so it will be abandoned. There are 3, 4, 5, or 10 miles of roads through the public domain. I often find this in the National Forests, where access roads to remove timber are situated. What would be the disposition of such roads and who would be responsible for them? Should they be covered with the same penalties as the excavation of the mine site?

MR. GARWOOD. I would suggest that this would be up to the controlling agency. In many instances the Forest Service might want a road in the area for fire control or other reasons, considering the road was built in conjunction with the Forest Service. I might further answer the question by citing an example of recent experience in the Deer Lodge National Forest. Here we encountered a situation where the ground was not as fertile as we had hoped. We have worked with the Ranger, and with his recommendation we are leaving part of our access roads and all of our location pits. When the time is right and weather permits, all the disturbed area will be seeded with grass of his specification.

THE CHAIRMAN. Relative to the same paragraph quoted by Rep. Romney, you say, "In our opinion, the U. S. Forest Service and other federal agencies provide adequate control of this use of the bulldozer for this purpose." A moment ago, a representative of the Forest Service was describing some problems with the bulldozer. Now can you explain that sentence? There is some confusion.

MR. GARWOOD. I think it is possible that federal agencies are not using all the rules and regulations at their command. They can stop road construction into an area if a special use permit has not been granted. I cite as an example the very controversial White Cloud issue in Idaho. Right now this is a good example of the Forest Service refusing to issue a special use permit for road construction until several hearings have been held related to the feasibility of road construction. On the basis of

information developed at the hearings, it might be two years before the permit request is acted upon. This is a reason why there should be time limits to avoid unrealistic delay.

My only answer to your question is that there are adequate rules and regulations, depending on whether the federal agencies want to use them. There is one other problem, and this is in the past--about five years or longer, but at that time many people felt that we didn't need federal agencies to control what we were doing. There were certain laws, related to the mining community, that allowed access to an area, and roads could be built in the best and cheapest possible manner. Yet, today I know of very few people who are not trying to cooperate with all the federal agencies in the matter of multiple use of access roads. The whole thing has to be looked at in two ways, the way it used to be and the way we're trying to make it today.

REPRESENTATIVE ROMNEY. Is that the White Cloud area in Idaho?

MR. GARWOOD. Yes, sir.

REPRESENTATIVE JORDAN. I have one question, Mr. Garwood. How do you get exposure or excavation of a discovery pit without the use of a bulldozer?

MR. GARWOOD. You can always hire a man with a pick and shovel like they used to do it, or under the present law you can use a bulldozer. In the Deer Lodge area previously referred to, we used a bulldozer or a backhoe. The backhoe was used where we could do so without having to build a road to bring it in. This disturbed less surface. There were several excavations that the Forest Service and ourselves jointly decided would better be left open than backfilled. This saved timber, and grass was seeded to eliminate erosion.

REPRESENTATIVE JORDAN. Would you then agree with the committee that test coring or sampling by the core drilling method would be better than the discovery pit procedure?

MR. GARWOOD. Yes, sir. In 1969 we made specific recommendations on this point and referred to the California and Nevada statutes in requesting that something besides surface excavations be used for discovery. I think, however, that we would object to a proposal for an actual assay to determine a discovery. In many instances mining law is based on crude map theory. Ten years ago a 0.6 copper assay was not considered ore, but today, if I were to find 10 feet of 0.6 copper I would get excited. I predict that some day 0.3 copper will get someone excited. Thus you cannot establish an economic limit today and expect it to hold for the future.

REPRESENTATIVE ROMNEY. I believe the previous hearing held in this chamber brought out considerable discussion relative to bulldoze usage and of more sophisticated chemical methods in establishing an ore body. At that time there was some discussion, also, concerning whether the pick-and-shovel prospector should still be permitted to use present practices. If my recollection is correct, that was the general decision. Is that your decision?

MR. GARWOOD. Yes, sir. I do not believe that we should, at any time, enact regulations which would eliminate the small operator or the individual who is earnestly looking for minerals. He should be given an opportunity, but at the same time the law should be so written as to favor and encourage the use of other methods.

THE CHAIRMAN. Thank you, Mr. Garwood. In our February meeting we received an oral statement from a professional geologist, who indicated the Wyoming law had eliminated the necessity of bulldozing for exploration work. He indicated that such bulldozing had practically ceased at the present time.

Now I would like to call Mr. Don Aldrich, who is secretary of the Montana Wildlife Federation.

DON ALDRICH. Thank you, Senator. The Montana Wildlife Federation wishes to commend the Governor's Conference Committee on Mined-Land Reclamation and Montana Mining Law for clarifying the issue and for promoting public involvement. Your efforts will assure wise use of natural resources and an orderly development of Montana's mineral wealth.

During the past year the Governor's Council on Natural Resources has developed a mined-land reclamation contract that reflects concern for public values. It requires that reclamation plans be submitted and approved, sets minimum standards for reclamation, requires the use of topsoil, establishes an advisory board to the Bureau of Mines, and requires that the mining company be bonded.

These requirements, we feel, are necessary and should be included in the law to assure proper administration and uniform contracts to all developers. We also feel that one more important step must be taken. Administration of this law and these contracts cannot be done satisfactorily by the Bureau of Mines and Geology. Planning and supervision of reclamation will be accomplished only by people with experience, training, and dedication to proper care of surface values.

Recommendation V in the Proceedings and Recommendations of the 1969 Governor's Conference on Mined-Land Reclamation and Montana

Mining Law proposed that the State Commissioner of Lands and Investments be the administrator of the act. We would agree with this suggestion, but would warn that this office is inadequately funded to meet present responsibilities and that it must have money and personnel to accept a new assignment.

The committee's Recommendation I is commendable. We would propose a change or an addition to subtopic 4. Whether a bulldozer is to be used or not should be at the discretion of an agency administering surface resources. Topography, vegetal cover, soil types, and watershed should be the determining factor. We would suggest that the land management agency should be authorized to issue permits for the use of heavy-duty equipment and that no such equipment be used without permission on either public or private lands.

Conditions outlined in Recommendations II and III are agreeable, but we do not believe that the Dredge Mining and Land Preservation Act should be amended as recommended in IV. The district court decision is being appealed, and we would object to any attempt to revise or weaken the law until final determination of its legality.

Recommendation V, with the changes I proposed earlier, appears to be acceptable and adequate. I do question the intent of subtopic 2, which would repeal the 1969 statute. Regardless of what act we work under, it is our feeling that reclamation must be compulsory to assure fair competition between operators and to assure adequate reclamation.

I will not venture into the economics of coal mining or reclamation, but wish to express the immediate need for research funds to implement a variety of studies in revegetating mined land. Existing research on old spoil banks will not provide the needed information.

Cooperation between operation and research will be essential to identify the need for modifying topography, restoring topsoil, and the many other variables involved in restoring beneficial vegetal cover to disturbed land.

Federal grants are presently providing funding for coal resource studies, but similar funds are not available for reclamation studies. In this case I feel that this is putting the cart before the horse. Surface values should not be disturbed until there is assurance that they can be restored.

We feel that reclamation research should be a cost of operation passed on to consumer in the form of a tax per ton mined.

In behalf of the Montana Wildlife Federation, I want to thank the members of this committee for their service and for the opportunity to comment on their recommendations.

QUESTIONS:

THE CHAIRMAN. I have a question. I am not sure I understood this right or not. In regard to your reference on topsoil, we are running into many different viewpoints of many different people. There may be areas where the topsoil is insufficient to bear much consideration. Now, if we try to spell out in the law that the topsoil has to be restored, we may run into difficulty. Some areas may have thick soil, other areas may be deficient. This whole matter needs to be looked at. What I'm getting at is this: Cannot our contract system be designed broad enough to take care of the differences from one mining operation to another? It seems to me that you cannot spell it all out at one time. Do you have any comment on this?

MR. ALDRICH. Our position has been that the reclamation must be mandatory and that it will have to be supervised for two reasons; (1) to get the job done, and (2) to assure uniformity between operators for fair competition. One operator shouldn't get away with something that another operator couldn't get away with. Now, my only reference, I believe, to restoring topsoil had to do with this research I was proposing. At the present time we don't feel we have enough information to tell the operator how to reclaim the land if he was willing to do it. We think we need a lot more information. Now, what I was referring to in reference to the topsoil was that the researcher would be working with the operator. The operator would be mining and they (researchers) would be working with him. They would restore some lands, topography to one angle, another place to another angle. Some places they would restore the soil, other places they wouldn't, in an effort to find out the best way of reclaiming land under all different conditions. Certainly we have to recognize the fact that we can't be uniform in our reclamation demands if conditions vary from place to place. The land in its original state varied from place to place.

REPRESENTATIVE JORDAN. In reference to the bulldozer, on page 2 of my copy of your statement you suggest that the land management agency be authorized to issue permits for the use of heavy equipment, and no such equipment be used without their permission on either public or private lands. Are you suggesting that laws be enacted to determine what a person can do on private land?

MR. ALDRICH. Well, I think the thing I was referring to there is, in many cases, where the exploration is going on on public lands, section lines may be crossed and suddenly they are on private land without knowing it. They may be on Northern Pacific, Anaconda, or some other of the larger land operators. Now, on agricultural land I'm sure they would have to have permission. In fact, I'm sure they would have to have permission to be on Anaconda land too, but under present

conditions with no permission needed to be on public land, they can cross property lines without knowing it.

THE CHAIRMAN. Thank you, Don.

SENATOR MITCHELL. Mr. Chairman, I would like to ask Mr. Aldrich one question. I just found this topsoil thing in a copy of the contract, in the model contract of the Natural Resources Council, "Provisions shall be made for the practical utilization of soil." Does that satisfy your point on soil?

MR. ALDRICH. I think I might like to rewrite that, but I don't know just how to say it. I believe that this land must be reclaimed to provide benefits for the general public. I'm not prepared to rewrite that statement at this time, though I believe it could stand some clarification. Incidentally, I failed to comment on the Forest Service and Bureau of Land Management's efforts in this, and with the state's cooperation . . . With the number of people involved, it appears to me that they are fortunate to have this kind of public interest.

REPRESENTATIVE ROMNEY. Don, out of this investigation, it now seems to me that some sort of administrative agency is needed. Many suggestions as to which agency have been made. If at some time a mining concern would fail to correct the disturbance in the soil and gaping holes would be left, or long stretches of road would remain after the mining concern had gone . . . In your opinion, should there not be an administrative agency to put things in order and charge it back to the explorer? That would mean that the correcting agency would have to possess engineering skill as well as machinery. Would you think that such language should be incorporated into a bill?

MR. ALDRICH. Well, Miles, you have asked several questions there. I was hoping to avoid comment on the new recommendations handed to us today. I haven't reviewed them sufficiently to feel qualified to make the kind of statements I would like to make. We were pleased with the selection of the State Land Office as the administering agency; we were also pleased with the fact that all the other state agencies were on the board in an advisory capacity, each of them have an interest in what happens to our public lands. The reclamationists, that's you and I, who have lived most of our life in western Montana have seen mining exploration come and go. We know what state they left the land in and that they were always broke when they departed. They didn't even pay their last month's wages. So we can ill afford that we are going to get reclamation under those conditions, unless a bond or a deposit is made prior to operations. I believe this is the only way we can be assured of restoration.

REPRESENTATIVE ROMNEY. We have seen this happen time and time again. If administrative agencies are not qualified and capable and possess the equipment and know-how to take care of this, we are going to have this sort of thing perpetuated. I think it is something we should consider at the time the new law is written.

MR. ALDRICH. It looks to me like it would be necessary for the managing agency to contract this work. I can't imagine one of our agencies having the equipment needed to do the work.

REPRESENTATIVE ROMNEY. Does Mr. Schwinden's agency possess the engineering personnel and equipment to do such work?

MR. ALDRICH. I doubt if they do. In fact, in my statement I pointed out that this agency was going to have to have increased personnel and funding if they are going to do the job. I think this is the case regardless of where we put it. We are going to have to pay the bill, and if we want good work, it's going to cost some money.

REPRESENTATIVE ROMNEY. Does the Fish and Game Commission possess personnel, engineering skills, and equipment to do such work?

MR. ALDRICH. I see you are going to tell me the Highway Department does, and that they are the only ones that have the equipment and skills you are talking about. However, they haven't yet been considered.

REPRESENTATIVE ROMNEY. What about the Natural Resources?

MR. ALDRICH. I don't think we need to look for an agency that has on its staff the techniques necessary to do the actual work. I think we need people who are dedicated to seeing that it is done and who have the ability to evaluate the ecology and determine what should be accomplished. I think a contractor is going to have to do the work. I can't imagine setting up a state agency to actually go out and do the mechanical work.

REPRESENTATIVE ROMNEY. Well, if we don't have an agency that can do it, then would we not necessarily have a bond which would be large enough to make the explorer do the job in order to save the bond?

MR. ALDRICH. I think this is an excellent idea. It's the only way that it can be done, an adequate bond or else a deposit.

THE CHAIRMAN. Sorry to drag this out, Don, but if I understand your comments correctly, then you are not in favor of any one agency being administrator. You are advocating that there be a reclamation oriented agency. Is that correct?

MR. ALDRICH. In my statement I said the Land Board was satisfactory, as selected by this committee. There are other agencies, I'm sure, that have the sensitivity to do it. We were not objecting to your choice.

THE CHAIRMAN. Thank you. I think, to elaborate one step further on what he is saying . . . something that is in the recommendations that you received today. I believe, in all fairness, that we have not had a witness here this morning who made any real comment on these recommendations. I'm sure that this afternoon someone may wish to comment. Any witness who appeared this morning may return and expound on them, if he so desires. I think this is only a matter of courtesy. We intended to get these newest suggested recommendations out prior to this hearing, but due to our secretary undergoing major surgery, it couldn't be done.

I believe the discussion of the administrative agency is good. This is what we are looking for. I do not believe that anyone on the committee has his mind made up as to just how it ought to be. I'm not sure that we know. At one time we kind of agreed that it would be the Commissioner of State Lands. That agency is worth looking at, but by the same token, if it does become the administrator, money will have to be provided. We are aware of that, and perhaps a professional person in that department may be what we are after.

I would like now to call on Mr. Giles Walker, of AMAX Corporation.

SEYMOUR S. BERNFELD. Mr. Chairman, Mr. Walker is on his way elsewhere because of an emergency, and I am here to make the statement in his place.

THE CHAIRMAN. Okay, would you come forward please.

MR. BERNFELD. My name is Seymour S. Bernfeld, and I am the general attorney for the Exploration and Mine Evaluation Division of American Metal Climax, Inc., a diversified and international mining company. AMAX is the name by which we are generally known, and Amax Exploration, Inc., a wholly owned subsidiary, is the the exploration arm of the parent company in this country and elsewhere in the world.

For almost a quarter of a century and long before the urgency of environmental control problems became so generally and painfully evident, Amax has vigorously pursued its own advances in this field out of a feeling of public responsibility. Beginning with the installation of devices to eliminate particulates from the chimney effluents in its Blackwell zinc refinery to its showcase projects of the past two years, the Urad and Henderson molybdenum mines of Colorado, the Amax drive in this direction has been the target of many favorable public comments. Without attempting to elaborate by citing the examples of a dozen or more Amax

plants scattered throughout this nation, we have found, strangely enough and quite in contradiction to the frequent assertion that the costs of environmental control represent huge unrecoverable expenses which must be reflected in consumer price, that our corrective installations have for the greatest part quickly paid for themselves in better quality and quantity of recovered production, increased profits from byproducts earlier lost or disregarded, decreased public legal liabilities, better health and less loss of work hours of the employee body, etc. We have been called upon a number of times by various state, provincial, federal, and foreign legislative commissions and administrative officials to assist in the modernization of mining legislation, including environmental control factors, and we are more than happy to be a part of the current praiseworthy effort on the part of the State of Montana.

Mr. Chairman, I have imposed somewhat on the valuable time of this conference to present this bit of Amax background, because it lends credence to our assertion that Amax approaches the problems of this conference with a view to the best interests of the community and the State of Montana at large. It certainly must be clear to all of us that we all must live in peace together and that there is no longer room for the industrial predator who would rob and despoil an area for its sole profit and leave behind nothing but scarred earth, wasteland, broken economy, and poverty. However, we must bear in mind, too, that the attempts to settle all of the conceivable costs of mined-land reclamation and restoration of aesthetic and recreational values for the general good entirely upon the operator and without reasonably accurate and determinable limits is apt to be shortsighted and destructive of the ultimate welfare of the state itself. For in order to introduce and support industry, it is first necessary that the proposed venture be shown to be viable, that is, that it should produce not only a return of the invested capital within a reasonably short period but also a reasonable profit so that new ventures in this state or in other states may be generated and developed. This necessarily requires advance estimates, not only of the market situation and the actual cost of the capital plant and operation, but also the size of the concluding tab for reclamation, and these estimates must be fairly close to the ultimate truth.

Both the return of capital as well as profit are dependent upon sales of the mineral product far beyond the borders of any one state or even this nation, because this nation could not exist or maintain even a fraction of its present high living standards merely by producing for its own consumption. It must export. This nation, unlike many other competing nations in this world of ours, provides no subsidy to its miners, smelters, refiners, or fabricators. It provides no tax-free period for the earlier stages of a mining venture. It permits no market control cartel, all of these devices being fairly common in other exporting nations of the world. It should behoove us then, in fixing the financial burden for mined-land reclamation upon the operator, not to do so vengefully but to do so

reasonably in the light of the value the operator may have destroyed as of the time of destruction and not as an absolute and complete liability for return of the land to an even higher use than it had before commencement of mining operations. In other words, the usual rule of damages should apply and the limit of the mine operator's financial responsibility should be the value of the land at the time it was first taken under control by the operator and not at some later date at which the value may have been radically increased due to the mining operation. If a true value of lands before improvement of them by a mining project should be shown upon the county assessor's books, this value should be taken. This will have the double-barreled advantage not only of being fair, but of permitting an exact estimate of the outside limits of the operator's costs for reclamation.

It should be borne in mind, too, when discussing mined-land reclamation rather than coal strip operations alone, that what may be the best use of the lands 40 years hence may not even be foreseeable at the time the operator is required to commit himself to a reclamation program. Perhaps at that date in the future the entire character of the surrounding country may have changed, and who is to know now whether a lake, a forest, grazing land, or what have you, would be the best use 40 to 50 years from now.

The contract approach of the State of Montana appears eminently reasonable with the adjustment for values earlier suggested.

It should be borne in mind, too, that the absence of a definite outside limit for the operator's liability will unreasonably increase the cost of any surety bond he must post for mined-land reclamation. The insurer must protect himself as against the highest possible liability, so this feature of definiteness is essential.

The other side of this coin is that the bond requirement will almost certainly eliminate the "ragged-assed miner" and the small mining company, for neither will be able to qualify for the bond. Amax is heartily in favor of the principle of mined-land reclamation and actively practices it, but it must honestly point out wherein some of the present attempts to put the principle into practice may not have the desired result. We have in mind, particularly, the requirements on the part of various governments and governmental agencies to compel an operator to commit to a definite and detailed plan of reclamation before starting to mine or even develop rather than to commit to a plan of reclamation which may be determined by negotiation at a later date within the top limits earlier mentioned. We respectfully submit that no one has yet adequately researched the problem of what sort of vegetation will grow in the backhoed spoil after removal of its minerals, disturbance of its porosity and water flow, etc. For example, some time ago we were interested in Florida phosphate, and as you may know, most of the state of Florida is a big sand spit sticking

out of the ocean without much elevation. Large portions of the northern part where we were interested were pine pulp land. We found by exploration a lot of phosphate. In dealing with the pulp and timber interests, we found they all wanted backfilling of stripped and pit areas and the planting of healthy varieties of trees. I forgot whether it was 5 or 10-year specimens. These were to be planted at specified intervals when we were through. I said to them, "Gentlemen, how can you possibly do this? You don't know that this land is going to support that sort of growth after the removal of the minerals and the change of the chemical and physical makeup of the land." There is no experience record for it and the nutriments necessary for these trees may be gone.

Coming back to the recommendations on mining claim locations, I read the new recommendations and will comment in relation to them. First, I think we must clearly keep in mind the various types of land we are dealing with. If you recall, when the State of Montana was admitted, part of the law authorizing admission of the state, as well as all the western states, was that they would never interfere with the U. S. Federal right to federal lands. I think some of the prior discussion perhaps overlooks this factor. You have federal-owned lands, you have state-owned lands, and you have lands under private ownership. On the federal side you also have the forest lands. Some federal lands are open for location; you have grazing lands, and you have lands open to a number of other things. In considering legislation of mining law, I think you must keep in mind the differences between where the federal government has a pre-emptive right and where the state government can operate effectively.

Now, with reference to the recommended changes in mining location laws on Recommendation I, we agree that the excavation of any stated amount of earth or rock to expose a discovery should be eliminated. The reason for the rule has died at this time. It was originally intended to compel a miner to show his good faith in days when lodes were located by surface outcrops. It no longer serves a useful purpose and is not required by federal law. This requirement is the sole creation of state law, and by state law it can well be eliminated. Modern methods of discovery are not limited to pick and shovel or bulldozer. I think also that we are forgetting a little doctrine that has grown up in federal law, and one that helps a lot. Most of the real finds today are a result of drilling. Drilling can begin long before you have a valid discovery. Usually what happens, let's be frank about it, is that a phony discovery pit has been excavated. Then the drilling begins until enough mineral is found. Under the federal law, however, you have the doctrine of *pedis possessio*, which allows you to take possession and stake a location, and hold that location until you make a discovery.

As a practical matter, what I have seen work out is a rough, old western style of operation--I'm not talking about my company. You find

people staking out land and they are looking for a real discovery. Surface geology by aerial reconnaissance has indicated the likelihood. None of this geophysical or geochemical work amounts to a discovery or will give you a discovery. All you get out of it is an indication of what may be there, drilling may find it. We must keep this in mind. Under the federal law this kind of work is not discovery work, and I don't believe the State of Montana will try to convert it into something it is not. Under the doctrine, you can hold it, you can drill it, and when you find it (the mineral deposit), your claim is validated.

A prior discovery in the same area, though unknown to you, allows the prior discoverer to come in ahead of you. This is because the location on an actual discovery provides control. However, this has wound up in long conflicts, shotgun riding of the range, and a few other things, so there ought to be a little bit of order restored in this direction. All that the federal statutes require is that there be a discovery, and what constitutes a discovery is a matter of federal law. State enactment in this respect would only create confusion, especially in view of the long line of administrative and court decisions on the subject.

We don't believe in the assay requirement. It is impractical for a number of reasons, and we don't believe it is a proper field for state legislation because of the federal interest.

We agree with the statements expressed in item 3 under Recommendation I, with reference to preservation of water supplies. Item 4 can easily be taken care of by no. 1.

With reference to the new Recommendation A, I think you are stepping into the federal field. I don't think the state has the right to do this on federal lands. As a matter of fact, the Public Land Law Review Commission has recommended that the federal law be amended to permit something like this--some sort of preliminary permissive location which replaces the old *pedis possessio* doctrine while you are looking for a real find.

As far as federal lands go, your new Recommendation C, I think the first option standing alone would be sufficient. If you were to eliminate the discovery pit requirement, much of the problem would disappear. The other side of the bulldozer problem is reflected in indiscriminate road bulldozing. Usually under the group claim theory, where, say, a batch of two dozen claims is staked, a bulldozer drives a road from A to B and the operator claims benefit to the whole business and takes his assessment credit for all claims. I would also assume, because there is no checkup on claims and assessment affidavits, that a lot of indiscriminate road bulldozing takes place. In the National Forest this can be controlled because a permit is necessary. But when you are out on the open

range, I don't know of anything effective in stopping bad tracks. There is a big fat gap in the federal law, and to have real reclamation, the law needs tightening in that direction. Bulldozing roads is the cheapest and easiest way of doing assessment work, and in many cases it is the most useless way.

Your new Recommendation B was in line with the comments I had in my original statement. I think the most the state can do is to provide a presumption as a rule of evidence. I see no reason for the delay of 6 months and think it would be reasonable to put the limit down to as little as 60 days. This should give the people who are mining time to correlate their figures, prepare their affidavits, and file them.

The prima facie abandonment theory has this result. A has staked a claim but did not file his assessment work affidavit. On the 61st day, or the day after the due day, B files a new location claiming a new discovery, or for that matter taking over the old discovery as his. This will not wrap the matter up, but it will force the parties to go to court. A may say, "Even though I didn't file the affidavit, I still did the work." If this is so, the presumption or the presumptive aid that B got goes out the window. I think this is fair. All you can do is to prod them with the state law. Only the federal law could take the claim away entirely.

We certainly agree with your Recommendation F, part 1, that you change to "the best interests of the state," because the lands owned are just one of the interests of the state along with others.

Relative to the 10,000 cubic yard figure, I don't feel qualified to testify. It is an arbitrary figure which, as pointed out, may be good for one but not for another individual operation.

In Recommendation F, part 4, an option involving a qualified expert is suggested. To be practical, I think it would be impossible to pick an expert entirely free without some sort of political back play. Let's not be utopian. If it should come to the expert, I would most seriously recommend that he not be of solely academic experience--take an experienced man from industry--a college man would be all right if he has the prior experience. Practical experience is the real key.

The commission set up as originally proposed may be a bit unwieldy, but takes within its scope all the agencies honestly interested in the project. Certain state agencies would be on as advisors without vote. I heard the statement of your secretary that they (Bureau of Mines and Geology) want no administrative assignments because they want to be free to give unbiased opinions. This, I think, is an ivory tower approach. It is a bit impractical in view of the situation here. Whether they want to do it, they are in the position to judge best as to

what should be done by such a council or commission in certain fields. So whether or not they want to be limited, I think part of the legislation should saddle them with the extra duty of judging the practical situation.

THE CHAIRMAN. You're not taking into consideration the political ramifications here, are you?

MR. BERNFELD. That's your ball of wax. I think my last comments took care of your no. 5 on the last sheet of the new recommendations.

Like the other witnesses, I would like to thank you for giving us an opportunity to express our views here. If there is any way that our experience can be helpful to you in the monumental job you have, I am sure we will be more than happy to make our people available to help out. Thank you.

QUESTIONS:

THE CHAIRMAN. May we have a copy of your statement?

MR. BERNFELD. Yes, the first part of my statement was read to you. The second part had to do with the mining changes, and this I don't have entirely. Here is the first part.

THE CHAIRMAN. Any questions?

SENATOR MITCHELL. Yes, I have several questions; but first I would like to comment on your general text. I really enjoyed it and it was most educational. Many of us have heard of the AMAX Colorado operations, and your company is to be commended. I understand you have quite a showpiece.

MR. BERNFELD. Thank you.

SENATOR MITCHELL. You mentioned a problem touched on by Mr. Aldrich relative to the necessity of land reclamation research, and you cited Florida as an example. Do I understand that your opinion is that a current gap exists in our program? That we just don't know enough about this, and it is one of the next steps for the State of Montana to move into?

MR. BERNFELD. I used the Florida example to point out what I thought was the excellence of the Montana approach in providing for a contract which would be subject to the negotiations as to what the reclamation should be later on. Say you put in a strip mine, I don't think that a mining company large enough to get a bond would be interested in an operation that would last for 3, 4, or 5 years. When they go into an

operation, it must be big enough to warrant the expenditure. I would say they are looking at an operation that would go 25 to 50 years. You might consider a pit operation in Utah and what should be done with the pit when the ore runs out. Some people might say, "Well, why not fill it with water and make a lake out of it." Someone else might say, "Control the slopes against slides, grass it in, and put in a stadium," or one of 94 other different things. As the pit operation progresses, the character of the land around it changes--it may become residential, and residents need schools, parks, businesses--therefore, right now we can't tell what the best restored use will be at the time the mining operation is completed.

This is why I like the Montana approach. Coupled with the contract approach, a limit must be set on the liability so the mining company knows what to expect. That's why I say that the maximum damage that can be done by the mining company can only destroy the body of land itself, an impossibility. Let's say isolated grazing land was involved at the inception of an operation, land which was assessed at maybe \$20 per acre; well, that should be the limit of the operator's bond, though 40 years hence the land might be worth \$4,000 per acre.

The land restoration, then, becomes a matter not only for the operator to restore to use, but when the value of the restoration wanted by the public at that time exceeds the damage done by the miner, then the additional burden is part of the public improvement and should be at the public expense. In the meantime, the state has made income and created jobs from the mining project, and all of this goes to the general fund. Part of the cost, you might say, of making beautiful parks costing more than the original base price should come out of general taxation. This is because it is for the general benefit of the people and represents more than the miner has taken (damaged).

Did I answer your question?

SENATOR MITCHELL. Yes, and then some. On that same line, you, of course, like our two-stage setup, if I may call it that, on the Montana contract system. Okay, I have two questions. Where is your company operating currently in Montana and what is your attitude on this big gap on the bulldozer that you mentioned, and related to that, what is your attitude on a mandatory permit from the administrative agency or landowner?

MR. BERNFELD. Well, this is confidential information. We are involved in Montana. A talk with the man in charge of our office in Helena covered six areas in Montana which are being explored right now.

You asked about getting permission for bulldozing. I think it would be the satisfactory thing to do on the federal side and on state lands as well. On state lands you might very seriously want to consider this. Instead of confining yourself to the mining claim practice of federal law, you might wish to consider straight leasing or mineral leasing on state lands. It would be simpler and easier for both state and operator to handle. Don't confuse the two sets of plans; as I said in the beginning, we must consider this from the point of view of the land we are talking about. On the federal side we have this gap in control of the bulldozer thing. I think federal legislation is needed. It might be that the Interior Department, under its usual way of being expansive, might step in and do it under a regulation.

SENATOR MITCHELL. Your testimony, I gather, is in direct conflict with that of Mr. Garwood.

MR. BERNFELD. No, I don't think so--in what respect?

SENATOR MITCHELL. (Reading) "In our opinion, the U. S. Forest Service and other federal agencies provide adequate control of this use for a bulldozer for this purpose."

MR. BERNFELD. I think he is talking there of administratively controlled areas, but my point is that large chunks of federal area don't have adequate administrative control to exercise that sort of supervision but still are part of the ordinary public domain. If you are in a grazing district, I can see some control, but get out in rough lands that may not be forest and then it is a puzzle. The Bureau of Land Management can't do it by itself. Years ago I served as a special agent for the Interior Department, and all they can do is send a man out on a trespass basis. You know how effective that is.

REPRESENTATIVE ROMNEY. I was a bit disturbed with a remark in the earlier part of your statement. It was to the effect the mining industry has no subsidy. Now, I understand the law in Montana and the nation. That is not accurate. Take, for example, the land in the public domain that the miner explores before he has the mine. He establishes a claim, and the claim becomes his claim or his company's claim after he meets certain requirements, is that correct?

MR. BERNFELD. Yes, that is correct.

REPRESENTATIVE ROMNEY. Well, in my opinion, that land is a subsidy. What do you think about it?

MR. BERNFELD. Number one, on a subsidy without a present value, you might consider this a subsidy to start with. But I was talking about direct grants, money grants, etc. For instance, on some of the

imports coming in from France the government (French) repays the exporter a part of their tax and a number of other things like that. Going back to mining law, you find it was adopted a century ago, and the problem at that time was whether the government should give away the land free for \$500 worth of work, or do what every other nation has been doing since the year one, that is, to regard the minerals as its separate property, no matter who owned the surface. Reading back into the history of those days, you would find the swing to the mining claim law was caused by the desire to encourage settlement in the West.

The government had taken over huge areas populated only by natives. The Louisiana Purchase in 1803 and a few others were made, and there was a vast area to settle. This is one of the ways in which it was encouraged. You may recall that the original claims were quite small and depended on the law of the mining district. This law related to as much as one man could handle for himself, so as to avoid, even at that early date, the great monopolies or someone carving up the whole area. The miners usually started on a "ledge" and some of the areas were as small as 15 by 100 feet. Later they finally got around to the legal federal standard of 600 by 1,500 feet. This has lasted now for a century, and our economy of operation and competitive position in the world has rested thereon. If you were to suddenly charge the miner, you might well throw a monkey wrench into the competitive situation of the country, and for that matter all the rest of the world. In the export setup you have a real bull by the tail. I wouldn't attempt to argue it here, for it would take volumes and volumes of research as to effect. This is one of the matters that came up before the Public Land Law Review Commission, as to whether we were to have universal leasing or the mining claim system. I think everyone will admit the system is quite cumbersome, so they (the PLLRC) came up with a compromise instead. They said, "Yes, you can have your claims--if you pay your royalties."

REPRESENTATIVE ROMNEY. I observe there is a wide gap in our viewpoints on this matter. There is a two-pronged approach to this subsidy business. I will inquire concerning whether a state law is a subsidy and whether a federal law is a subsidy. We'll take the state law first. Take a hypothetical corporation which is strip mining coal somewhere in Montana. The corporation develops its mine and starts to extract the coal and ship it to Cohasset or Billings or somewhere--that corporation starts to realize profits. As taxpayers in Montana we need a broad tax base to raise revenue by which to carry on the multiplicity of endeavors in which the state is engaged. But this corporation for over 10 years is not required to pay net proceeds tax in Montana under Montana law, providing it uses the income to pay off the expense of establishing the operation. As the operation expands, it puts more money in the operation with the consequence that the 10-year period continues into the future. So there is a tax relief here which amounts to a form of subsidy.

In the federal realm there is a tax subsidy under the depletion allowance for types of mining and oil production as well. The allowance varies with the type of product. It involves vast amounts of money, and if that's not a subsidy, then I'm far from first base.

MR. BERNFELD. I am not familiar with the Montana law you mention. I have just moved back to the Rocky Mountain country again, and I'm happy for it. If the State of Montana has done this, it is in the foreground of being progressive to meet Canadian competition. Canada has been doing it for years, and this has been one of the strains on the mining industry down here.

Give us the same benefits we can get elsewhere. Don't make us go to other countries if we can develop our own country. You say Montana has done it, then I applaud Montana for having done so. The state can do nothing but increase its own tax base by increasing or making more viable the number of projects that would be otherwise unviable. You speak of other benefits. Yes, there are benefits, and I think more methods have to come to meet this foreign competition.

When I said that we had no subsidies, I was thinking of it, of course, in a closeup sense. There are a number of benefits you can put under the definition of subsidies, and I would suppose that every business is subsidized in the same sense you mention, because the tax accountants have nifty little ways in and out of the tax statutes. They pull out what amounts to a tax subsidy, but the little fellow on salary cannot take advantage of it. I would call that a subsidy, if you are going to call what you list as a subsidy by that name. I mean there is none, outside of the type of thing you're talking about, in Montana tax legislation. On the federal level there is no direct grant, except the Development Administration of the Interior Department, which will aid a new mining venture. This was popular during World War II. I've forgotten the exact name of the agency that took care of the helped party with what amounts to mostly a low-grade loan.

THE CHAIRMAN. Thank you, Mr. Bernfeld. I hate to interrupt here, but I would suggest that you two fellows get together at lunch and carry on from here.

We will recess now until the hour of 2 p.m. Mr. Mons Teigen will be first witness called; and Dick Hodder, will you get your presentation ready for the second spot. Thank you very much; we will return at 2 o'clock.

NOON BREAK.

THE CHAIRMAN. The conference will come to order. We will have a coffeebreak at about 3:30, compliments of the Montana Water Resources Board.

At this time I will call on Mons L. Teigen, who is secretary of the Montana Stockgrowers Association.

Oh, yes, before I forget, the missing member of our committee has arrived, Senator Glen Rugg over here (pointing). He has informed me that he is late because the airline couldn't set him down. Mr. Teigen, are you ready?

MONS TEIGEN. Mr. Chairman and Members of the Committee. I am Mons Teigen, secretary of the Montana Stockgrowers Association. Our organization greatly appreciates the opportunity to present a further statement concerning mined-land reclamation to your group.

The general public quite often overlooks a little-known fact in considering coal mine reclamation. This is that in eastern Montana the bulk of the minerals underlying the lands is held by someone other than the surface owner. In southeastern Montana, most of these minerals are held by either the state or federal government or the Burlington-Northern Railroad. This casts a different light on the reclamation process, because the man who owns the surface receives no benefit from the minerals as such, but rather faces the loss of part of his ranch. Once the mining is completed and the reclamation process is started, theoretically some use can be made of the land for livestock grazing; however, many years will elapse before this will be the case.

A suggestion which I feel has not been given sufficient study is the thought that the royalty owners themselves share in the burden of the reclamation process. After all, they are the individuals who are reaping the greatest benefits from the development of the coal resource with little responsibility for the damage done. This might be a solution to the problem of financing a reclamation program.

Recreational development of the mined areas will no doubt be significant. I would like to request, however, that the committee not overlook the potential for livestock grazing on these lands as well. Recreational development will be possible in areas where there is access; however, there will no doubt be areas on which access would be limited. It should be kept in mind that both grazing and recreation can be developed on the same tract of land. Consideration should be given to the eventual ownership pattern after reclamation. Will the lands be deeded to the Montana Fish and Game Department as the recreation agency for the state? And if so, will a payment in lieu of taxes be made to local government in order that they may continue to carry the same tax burden that they have heretofore? Or will they continue to be owned by the coal company and subject to taxation to them? My guess is that the coal company would be happy to deed these properties to whomever would accept title to them in order to rid themselves of the tax liability.

The final point that I raise is that most publicity heretofore has been in connection with coal mining; however, our association is concerned over the damage created by other types of mining activity in the state. For example, large bentonite deposits are in the process of being developed in northern Montana which will disturb thousands of acres of public and private land in that area. There is also much interest in uranium in southwestern Montana, a mineral which I understand would be mined under open-pit methods. I would ask the committee to not overlook the problems created by mining these types of minerals as well as coal.

Our organization realizes that if our nation is going to continue to satisfy the demands placed upon it for both power and manufacturing goods, that mining must be permitted, and we commend your committee for giving this subject this amount of study.

Mr. Chairman, that concludes my prepared statement, but I have some additional comment. This morning I received the supplement to the committee recommendations and would like to briefly discuss a point in Recommendation F concerning the selection of the administrator of the reclamation law. Having had some experience in the office of the Commissioner of State Lands, I realize the number of duties placed upon that official. I support the recommendation of someone who preceded me here who suggested that the land commissioner, if he should become the administrator, be given additional technical assistance and help in order to handle the job.

It is easy to hand these jobs to an individual just because he happens to be in office, but it is something else to administer the program and implement it properly. I think there is a real opportunity for the University System to assist in the process. They do have experts in narrow fields, and I think they would be very helpful. But I think they would have to be directed by some administrative group.

If there are any questions, I will be happy to answer them.

QUESTIONS.

SENATOR MITCHELL. Just a comment--I think that any further witnesses should be forewarned that Rep. Miles Romney is sharpening his knife.

REPRESENTATIVE JORDAN. Mr. Teigen, can you give us some estimate of the holdings of the Burlington-Northern in the Colstrip area?

MR. TEIGEN. No, I couldn't. There are some Burlington-Northern people here who may be able to give you that information, however.

REPRESENTATIVE JORDAN. Fine, then I'm sure we can get it from them.

THE CHAIRMAN. Thank you, Mons, for a brief and fine statement. Mr. Hodder, are you ready with your slide show? Fine; then you have the floor.

DICK HODDER. (Gave a slide presentation on the Agricultural Experiment Station's revegetation research on coal mine spoil areas in eastern Montana. He made appropriate comments and noted his project was funded by the coal operators and by the Montana Coal Council through the Bureau of Mines and Geology. At the completion of his presentation, he asked for questions.)

QUESTIONS:

THE CHAIRMAN. I have one. I would like to ask, Dick, in your work so far, if we proceed on the program on which we are now working, where the mining companies do the reclamation, do you see any great advantage in their doing what they can as they are mining, rather than doing it after mining? Or, in other words, will they be able to spread some of the dirt around in a better fashion if they are charged with the reclamation?

MR. HODDER. Perhaps I didn't carry out one of my remarks about the new spoils far enough. I didn't show the new spoils just created by Western Energy. These are now being leveled so that we can for the first time work with new fluffy spoils. We intend to apply various treatments to determine if there isn't some way to shorten the waiting period between the time of mining and the time of reclamation. Now, most companies think they are wasting time and money if you go in within 2 to 3 years after mining without allowing the spoils to settle. We are now trying diverse ways to make the spoils settle fast enough. We use precipitation traps to make them settle sufficiently fast to support growth of grass or at least some sort of cover. This is important because if we can get something growing we can cut down on erosion.

In regard to your question on the feasibility of companies doing reclamation work while mining and just how much can they do, I would say it would be quite expensive for a company to save its spoils in the mined form, to hold them for two years, and go into the reclamation job. Reclamation development should accompany mining, because the heavy machinery is there and is not busy every minute. If this machinery can be used in knocking down spoils, then this is the cheapest way to get the job done. I should say, also, that at least three rows of parallel ridges should exist so that toxic material might be buried in the troughs--the ridges have to be broken down in both directions. This means that

you can work on two ridges simultaneously and retain the third ridge between the reclamation operation and the coal-mining operation in order to avoid mixing up dirt and coal. This requires a certain length of time determined by pit size and size of operating machinery, etc. These factors determine how soon it is.

THE CHAIRMAN. Any other questions?

SENATOR MITCHELL. I have a brief question. Dick, in all your studies of vegetation and plant growth and everything, have you had any studies or do you have the resources to study the overall effect? In other words, are you just concerned with the growing of grasses and trees, or have you gone into the overall and ultimate ecological plan for the area?

MR. HODDER. No such overall reclamation work has been financed to date by private company money. We do have an active research program with the Bureau of Mines and Geology, and in designing this program, I favored dwelling more on the ecological impact of mining on the grazing matters of both cattle and game--the economics of the thing to a certain extent. There is a tremendous problem when you get into economics. Yes, we do have an active project going which concerns far more than the range or vegetative aspect.

SENATOR MITCHELL. Who all is involved in this?

MR. HODDER. The U. S. Bureau of Mines, the State Bureau of Mines and Geology, Western Energy Company, Knife River Coal Company, Consolidation Coal Company, and Rosebud Coal Sales or Pacific Power & Light Company. These are the participating companies and agencies.

SENATOR MITCHELL. Do you have matching federal funds?

MR. HODDER. We have no matching funds at all. This is funded by the companies and the U. S. and State Bureaus of Mines.

THE CHAIRMAN. Thank you, Dick. At this time I would like to call Mr. Ted Schwinden. Ted, are you here? Yes, Mr. Schwinden is our commissioner of state lands.

TED SCHWINDEN. Thank you, Senator, and Members of the Committee. I am testifying as Chairman of the Advisory Committee on Mined-Land Reclamation of the Council of Natural Resources. As the committee knows, we have been doing what is, I suppose, in a sense a parallel investigation. I will make a brief report, as it touches on your recommendations.

Since November of 1969, a special committee of the Governor's Council on Natural Resources and Development has been reviewing coal mine reclamation contracts and procedures. Our committee has not specifically reviewed the tentative recommendations of your conference as you put it together. It does appear, however, that the consensus of our committee is reflected in a proposed model contract adopted by the Council on Natural Resources in May parallels many of your recommendations. In August of this year, a joint meeting of the Natural Resources Council Committee, federal agencies, and representatives of your group reviewed in detail the council-approved contract. Governor Anderson had requested such a meeting to develop reclamation standards which would be acceptable to both state and federal agencies.

We developed a draft copy of the standard surface mined-land reclamation contract at the August 20 meeting, and this is presently under review by both state and federal agencies. I have with me, for your information, a copy of that proposed draft for your review. You will note that the proposed contract provides for only one reclamation plan, to be submitted prior to commencement of mining operations, and eliminates the preliminary reclamation plan which we rarely talk about. The committee has also recognized a need for appeal procedure through the contract system, but there is a feeling that any appeal board should not be composed solely or strictly of Advisory Committee members, for what we feel are obvious reasons.

This is the only testimony we wish to present on behalf of the Advisory Committee.

THE CHAIRMAN. Ted, would you repeat that last statement, please.

MR. SCHWINDEN. Yes (statement repeated).

QUESTIONS:

THE CHAIRMAN. Any questions?

REPRESENTATIVE JORDAN. Mr. Schwinden, I was wondering about this appeal board. Actually, I believe the companies have the last recourse of going to the Montana courts, in the event they come into conflict on their mining operations, regardless of any board we might establish. Do you feel such an appeal board is a necessary intermediate action prior to going to the courts? After the advisory board, then to an appeals board, before you go to the courts before you get a final determination?

MR. SCHWINDEN. Mr. Jordan, at the meeting attended by state and federal agencies and Senator McGowan, I think there was a general feeling that in this type of regulatory activity, if you can provide an administrative appeal you can probably avoid the necessity of going to court at all. The only feeling in the discussion on that day was that both from the viewpoint of the state and the industrial standpoint, that it would probably be better if the same people who approved regulations or procedures did not sit in judgment on the appeals board. There was a feeling that some of the people should be there because of their expertise. But we might broaden representation and include others who had not participated in the establishing of the reclamation plan. Certainly the industry or the regulatory agency always has recourse to the courts.

THE CHAIRMAN. I have one other question. This morning here it was mentioned by one or two people relative to exploring the possibility that maybe we can find and provide the funds to put this expert in connection with your office, maybe not directly under your jurisdiction but at least in cooperation with you. Would you have any objection to that type of performance?

MR. SCHWINDEN. You are talking about the proposal submitted this morning. I really haven't had a chance to review the details. Dr. Groff did inform me of them Friday, I believe. I'm really not in a position to suggest to the committee where the administration of the reclamation laws should be. I perhaps don't have the sensitivity that Dr. Groff does to isolation from what we call partisan politics. Whoever this person should be, he certainly should have expertise, but should also be sensitive not only to the needs of the industry but to the desires and demands of the public. We don't want to isolate him completely from those pressures and those needs. I don't know how much money it would require, but you will have to have one full-time person who is familiar in that area. I'm not sure what you propose. A man who works in the department--are you proposing that he not be responsible at all to the department? Is that what you are proposing?

THE CHAIRMAN. Well, I'm not sure that we have proposed anything. We are trying to find a nucleus where something will balance out right. We haven't had a chance to discuss this as a committee, but I believe we must have someone who is out of reach of the political implications--someone who doesn't have to shift every 2 or 4 years with possible changes in the administration. We won't find the type of person we want if he knows he will be there for just, say, 4 years. If this is the direction we take, that person should have some sense of security as long as he is doing the job.

MR. SCHWINDEN. I won't quarrel with this, Senator McGowan. The only problem that I see--I'll relate it to our farming business--I wouldn't want your hired man on my farm taking orders from you. I think you can give a man job security and still maintain a line of responsibility.

THE CHAIRMAN. Thank you very much, Ted. We will now call on Dr. Arnold Silverman.

ARNOLD SILVERMAN. Thank you, Senator McGowan. I'm not quite sure what comments the committee is considering--those that were distributed this morning or those in the official publication of the proceedings and recommendations. My written testimony deals with the published recommendations, and I should like to add some extemporaneous remarks about the material we received today. I am appearing here today and presenting this statement on behalf of myself and John McCabe, professor of law at the University of Montana.

Our remarks will be brief, as suggested by your secretary, and shall deal only with part 3 of the recent publication of the Proceedings and Recommendations of the Governor's Conference on Mined-Land Reclamation and Montana Mining Law.

We recommend that the committee not move hastily in following Recommendation IV regarding the Dredge Mining and Land Preservation Act passed by the 1969 Montana Legislature. Our position is quite simple. The act referred to is still under litigation in the Montana courts. Although the act was found unconstitutional in a district court case, the attorney general, in his wisdom, has decided to appeal to the Montana Supreme Court. To rewrite the Dredge Mining Act at this time is to anticipate what the Supreme Court ruling will be on this matter. Inasmuch as we do not know, at this time, whether the Supreme Court will uphold the district court decision or whether or not the grounds for that decision will be maintained, it is our advice that the Dredge Mining and Land Preservation Act not be altered before such a ruling is at hand. It would appear highly unwise and just a bit presumptuous to rewrite the Dredge Mining Act when the grounds for possible negation of the act have not been determined by the State Supreme Court. The wheels of litigation turn slowly; however, there is a good chance that before the opening session of the 1971 Montana Legislature, a ruling by the Supreme Court will be made. Until that time, we caution against the preparation of a new act, or amendments to the current act, which might get statewide publicity at a time when the Supreme Court is considering the case.

We find much to be commended in Recommendation V. The move to change the title of the act to provide for reclamation of all land disturbed by surface mining, whatever the nature of the mineral mined, is

certainly a positive step. The general structure providing for the State Commissioner of Lands and Investments to be the administrator of the act and the establishment of an Advisory, Review, and Appeal Court are also positive steps.

Under sec. 8 and 9, however, we would recommend that the law specify that both the administrator and council shall be guided by the latest regional approach to surface mined-land reclamation contracts which have been drafted in consultation between federal and state agencies. Such a draft copy dated August 20, 1970, is appended to the end of this testimony. We believe that the latest regional approach contract provides a workable base on which both the coal operator and the state can assure each other that mined-land reclamation has a high priority in the total environmental picture of Montana. Inasmuch as the Governor's Council on Natural Resources in cooperation with the Montana Bureau of Mines and Geology has played a major role in producing the latest coal mined-land reclamation contract and in drafting the regional approach contract of August 20, 1970, we assume that such an approach would have wide support within the State of Montana and the Montana Legislature.

In any case, the major failing of the recommendations on pages 60 and 61 of the conference report relates to sec. 8, subsec. b, where it stipulates that the preliminary reclamation plan, when practical, be submitted prior to the start of actual mining operations. It goes on to say "a final reclamation plan may be submitted at a later time at the option of either the administrator or the operator." The regional approach provides that a reclamation plan shall be submitted and approved prior to the commencement of surface mining operations. Again, under sec. 8, subsec. b, the last sentence reads "it is the sense of the legislature that an operator be allowed to make reasonable changes in a reclamation plan if there are good and valid reasons for so doing." We agree with the intent of this statement but suggest that all alterations in the reclamation plan submitted by the mining company shall be reviewed and passed upon by the Advisory Council. I refer you to page 6, sec. 4, of the regional approach draft contract, which stipulates that the reclamation plan can be amended or a new reclamation plan can be submitted. However, both amendments to the existing plan and the resubmission of a new plan must be approved by the administrator and Advisory Council. Lastly, we are in support of a performance bond of not less than \$200 per disturbed acre (as in the regional contract draft) rather than, as stated on page 61, sec. 10, of the conference report, "a performance bond in the range of \$50 to \$500 per acre."

With respect to Recommendation I, we would like to commend the committee for most of the suggestions listed. We have one addition to add that we think is perhaps both necessary to the exploratory mining company and acceptable to the public in general. The present law provides

for 30 days in which discovery work on a given claim must be performed. Inasmuch as we think and we hope that drilling will replace a good deal of the discovery pit work now demanded by Montana law, the time period for filing notice of discovery work should be extended to 60 days. This would allow exploratory mining operations to plan well in advance for their drilling crews and would alleviate the burden of having to dig a discovery pit if they could not contract for their discovery drilling within the stated 30-day period. We do not see how an extension from 30 to 60 days could in any way endanger the public interest in the discovery work procedure, and it would certainly allow the mining industry more latitude in both planning and procurement of competent drilling and development crews for their discovery work. There are many current examples of the inability to contract for drilling within a short period of time, and in order to protect the rights of the ore finder, such an extension seems reasonable.

Lastly, one comment on sec. 4 under Recommendation I. We believe that the use of bulldozing in exploration work is amenable to legislative act rather than the "sense of the legislature" or the discretion and written permission of the Montana Bureau of Mines and Geology. Environmental protection of state, federal, and private lands from indiscriminate bulldozer use will only be achieved through the passage of both a flexible and environmentally satisfactory statute. In this vein we propose the following:

"Before any person, corporation, partnership, or other group of persons or organization shall enter by means of roading or by any use of mechanical device into any public lands subject to the laws of the United States and the State of Montana pertaining to the location and extraction of minerals, for the purpose of exploring for and mining such minerals, such person, corporation, partnership, group of persons, or organization shall first obtain the written consent of the district supervisor of the United States Forest Service for the district in which such exploration and mining activities shall take place or by the district manager of the Bureau of Land Management responsible for the area in which such exploration and mining shall take place before such roading or gaining of access by mechanical devices shall begin. Permission shall be granted when the district supervisor or manager determines that the least disturbance to wildlife and watershed shall result, and that the standards for such roading or gaining of access by mechanical devices shall meet reasonable engineering standards."

Inasmuch as there is some legal question whether or not the sovereign State of Montana can sign to federal agencies responsibilities in this way, we have proposed a second draft, in which instead of the Bureau of Land Management and the U. S. Forest Service, we have designated two agencies which have both environmental expertise and

engineering expertise to oversee the ingress for mining exploration work on federal and state lands. Inasmuch as this area has not been pre-empted by the federal government, these laws should be meaningful. The two agencies we have designated are the Montana Fish and Game Department for the environmental concern and the district engineer from the Montana Highway Department for the engineering concerns. We submit these for your consideration.

That is the formal part of our testimony, Mr. Chairman, but I would like to spend a moment just to review the recommendations that came before us this morning.

I would agree with Mr. Bernfeld from AMAX that Recommendation A has already been pre-empted by the federal government. The State of Montana could not at this time pass regulations on federal land that could allow, in effect, the holding of block leases, and also would be opposed even if it were possible. The filing of special leases that are held in tight file status, meaning in secret files, which would indicate the reason for discovery work that has been done on the individual claims, that makes these claims valid. I would personally feel that if the federal government went to an all-out leasing situation, the country would be in much better shape in terms of the development of its mineral resources and the preservation of its environment. Inasmuch as that does not look to be in the cards for at least the next federal legislative session or perhaps even the one after that, I would say that Recommendation A has been pre-empted.

I have no quarrel with Recommendation B in the deletion of part 2, Recommendation I. Recommendation C, I have already talked about, that relates to bulldozing. I do believe there is an area where the state government can act and should act and must act if indiscriminate bulldozer use is to be restricted on federal, state, and private lands. Recommendation D on the abandonment proposition looks all right. Recommendation E, again the recommendation related to the dredge mining gap, I urge you not to change this statute, inasmuch as litigation is still in the courts. I think many members are familiar with the difference between actually extracting and removing sand and gravel from a place to wherever it will be used, and merely disturbing the position of sand and gravel in looking for small amounts of a material like gold or other heavy metal that might be valuable in extracting perhaps 1/10 of 1 percent of the volume of material actually disturbed in the dredging operation. I personally think the gold dredge mining act is a strong and workable act, and my own feeling is that it does not prohibit dredge mining in Montana.

Lastly, Recommendation F (sec. 4)--I think that one could find a qualified expert in the area of reclamation, but I personally believe in

the democratic system of government and in political responsibility. I believe that an expert cannot be insured, insulated, and isolated from criticism of the political system. Such a person should work under the State Land Commissioner if he is appointed. The government of the party in power should be responsible for the policies related to reclamation and mining. I think that's what makes our criticism work, and I'd like to see it work, and work even better. I think such an office should be under the Commissioner of State Lands rather than separated from and independent from this commission.

The last thing I would like to point out is that the new Advisory Committee as suggested, including the Land Commissioner, Director of Planning and Economic Development, and the State Forester be expanded to the committee originally listed on page 61 of the yellow book. I think anyone looking at this list of the Advisory, Review, and Appeal Council can find agencies that have as much or as deep an interest in mined-land reclamation as the Director of Planning and Economic Development and the State Forester, the Water Resources Board, Soil and Water Conservation Board, Fish and Game Department, Board of Health, and almost any of the other agencies that serve on the Governor's Council of Natural Resources.

Draft 2, Dr. Silverman's testimony. --"Before any person, corporation, partnership, or group of persons or organization shall enter by means of roading or by any use of mechanical devices onto any public lands subject to the laws of the United States and the State of Montana pertaining to the location and extraction of minerals, for the purpose of exploring for and mining such minerals, such person, corporation, partnership, group of persons, or organization shall first obtain the written consent of the district supervisor of the Montana Fish and Game Department and of the district engineer of the Montana Highway Department for the district of the respective agencies in which such exploration and mining activities shall take place before such roading or gaining of access by mechanical devices shall begin. Permission shall be granted when the district supervisor and engineer of these two agencies determine, in conjunction, that the least disturbance to wildlife and watershed shall result and that the standards for such roading or gaining of access by mechanical devices shall meet reasonable engineering standards."

REPRESENTATIVE JORDAN. That's what we are trying to reduce. (Relates to comment on the agencies.)

DR. SILVERMAN. Thank you, Mr. Chairman.

THE CHAIRMAN. Before you leave, I concur in your remarks about the Review Committee, but I would probably question this program. This was our fundamental thinking when we listed these agencies, the ones

that we felt were really interested. There were seven agencies listed, but from the experience we gain as legislators, you many times run into problems with too many agencies. This is not the final proposal by any means. We first thought of 16 agencies on the council, but if you put all of them on, you have something that is just too unwieldy. That is why we came up with seven. I personally wish there was some way in which we could select three, regardless of who they are. We then would have a better working setup. But by the same token, we would be setting aside some critical segment of our economy. That is not our intention at all.

In looking at the setup in some of the other states, one thing is apparent--don't get too big a board or you're in trouble. Do you see any three agencies in this group that you think could do the job?

DR. SILVERMAN. I understand your concern, Senator, but what I quarrel with is that when you have 60 or 70 agencies and you pick these three . . . the two that have pre-emptive interest in conservation. I think what we are concerned about are things like security and bonding . . . that the reclamation should be done but there were no expertises represented on these committees to be sure that the reclamation will be done. I'm not sure that it matters if you take these three versus another three. The point is, we do have well-established agencies working in Montana now who do have expertise to add their support . . . (several words garbled) . . . the State Forester's office is uniquely well qualified to serve as an environmental representative, as opposed to, say, the Fish and Game Department, or perhaps the Water Resources Board . . . should be left out in favor of Economic and Development. I don't see how one can be left out with respect to the other at this time. I think that six men of the mind to get something done can work very well together on this organization as opposed to three men who get the same results.

THE CHAIRMAN. I won't quarrel the point with you, but I don't think you have had as much experience with agency people as I have, with all due respect to you. Does anyone else wish to ask a question?

REPRESENTATIVE JORDAN. Yes, Dr. Silverman, can you tell me who the people were that in this draft . . . that I think was their latest regional approach . . . the draft on the contract between the mining interests and the Bureau of Mines.

DR. SILVERMAN. Ted Schwinden just testified to that. I believe they were representatives of perhaps . . ., I'm not sure, his office was involved, but I think members of the Natural Resources Council, plus the U. S. Forest Service, plus the U. S. Bureau of Land Management.

REPRESENTATIVE JORDAN. More than one state is involved in this regional planning thing?

DR. SILVERMAN. Yes, I am sure that it does involve more than one state in this regional planning thing.

REPRESENTATIVE ROMNEY. Professor, don't you think that in the interest of efficiency, perhaps an individual would be the best way of getting the thing moving . . . rather than a large group?

DR. SILVERMAN. Yes, and I think the administrator plays that role, up to a point.

REPRESENTATIVE ROMNEY. If you name these advisors, it seems to me that any state agency is required to come in and give advice. That is what we have them for. Too many are built up into a little empire of their own. You know the tendency on the part of each agency, they want to get more and more and bigger and bigger. Take Fish and Game, for example; I imagine they would like to get a little bit bigger. The more you can condense, the more likely you are to get some action. But you can't put it into an agency where the administrator is going to be playing footsie with the mining company, or pandering perhaps for politics. But I think if you are pandering the politics, the responsible people are going to see that you get things done and you get them done in the public interest, right?

DR. SILVERMAN. I would like to make one comment and that is that I would like to see the Advisory Council more than advisory. I would actually like to see it have the power to pass and approve the reclamation plans, to pass and improve any alternatives of those reclamation plans. I would like to see it more than just an advisory board to the administrator--a board with substantial powers to oversee and help the administrator to stop whatever kind of mine they wish. So perhaps we need some limitation in size with caution in selecting those agencies that have both the expertise and the ability to contribute real professional contributions to this problem.

REPRESENTATIVE ROMNEY. Each of those agencies enumerated on page 60, their administrators have plenty to do without taking on this responsibility, other than giving advice.

DR. SILVERMAN. That is true for probably every state agency, I think we find that as times get more complex our responsibilities grow larger and there is no way out of it but to take on that responsibility.

THE CHAIRMAN. Doctor, here on page 61 of the report of last year's conference, it states exactly what you said. They will review and

approve all contracts and reclamation plans and proposed rules and regulations. All we are looking at and exploring the field for is to try and find out if we can streamline the system and make it more efficient, not with the idea of setting anybody aside.

I am about half of the opinion, and this is only an opinion, that maybe all 16 agencies ought to be sitting in an advisory capacity instead of just the seven that we originally and tentatively selected. I certainly think the Agricultural Experiment Station is a good example. They draw federal funds, county funds, and state funds. We have seen they have a high degree of expertise in planning and research--we saw this in Dick Hodder's slides, and this should give them some position. I don't see quite how, when they are a combination county, state, and federal agency, we can throw them into a voting catalog with state agencies. The same is true with the Bureau of Land Management and the Forest Service--they are federal agencies. Yet, it seems to me they are experts in their field, and their position should be to advise and consult. Whatever number of people are set up here, they would be derelict in their duty if these people weren't called in when they have a problem in their field.

DR. SILVERMAN. I have no objection to what you said, Senator.

THE CHAIRMAN. All right.

DR. SILVERMAN. The Advisory Committee can be as large as it likes, but when you finally get down to investing power . . . then you will have to select someone to be responsible or some group of agencies to be responsible for advice, there is plenty of free advice in Montana.

THE CHAIRMAN. That is right. Harry?

SENATOR MITCHELL. I would like to remind Dr. Silverman, and of course anybody else in the audience, that in reference to this Advisory, Review, and Appeal Council, the gold book (1969 proceedings) has those seven agencies listed. The three-agency council is in the memorandum from our executive secretary, and this committee has not yet moved on it as yet. We are not now advocating to go to the three-member council, or to these particular three, or at least not as yet.

THE CHAIRMAN. We have 15 minutes available for another witness before we take a coffeekbreak. Let's see if we have someone with a short statement. Representative Vic East? Yes; Representative East is from Forsyth in Rosebud County and is close to the mining operations of Peabody and Western Energy.

REPRESENTATIVE VIC EAST. Thank you, Mr. Chairman. It is again a pleasure to appear before this committee and express my views and those of the affected people I represent.

I believe the first conference held in November 1969 did much toward bringing the industrial and conservation groups together, not only physically but hopefully also philosophically. I agree with the executive secretary in his opinion that "the majority attitude indicates that cooperation between industrial and conservation interest is already existent."

Since I am from Rosebud County, I am particularly interested in those parts of the recommendations concerning reclamation on strip-mined lands, limiting my comments primarily to Recommendation V.

I am especially pleased to see under sec. 1 the "intent of the legislature that mined land be reclaimed to its highest practical use commensurate with the needs of the landowners and the conditions of the locality." I think this is especially pertinent because of the fact that the vast majority of the land that will be mined is owned by surface owners who do not own the coal under their land. These surface owners will either collect damages or be forced to sell their surface and then buy it back after the coal has been extracted. Therefore, I commend the committee for considering these surface owners when reclamation plans are being drawn up and declaring that the legislative intent is to comply with the wishes of these interrupted but hopefully continued users of the land.

In line with this, I think it might be advisable to include the landowner in the formation of the reclamation plan, rather than give him only the right of appeal after the plan has been agreed upon and approved. It seems that the landowner who will be using this land in the years to come should be in on the preparation of the reclamation plan, since he is the person who will have to live with the results.

I would also like the committee to consider the possibility of having the coal owner pay for or share in the cost of reclamation, rather than have any of the cost credited toward the license tax paid by the coal mining operator. This would in effect remove the state from the financial end of the reclamation business, bring in more revenue, and would lessen or remove the possibility of doing a "cheap" job of reclamation in order to bring in more tax revenue. I have been favorably impressed by the willingness of the coal companies to accomplish reclamation, but feel that neither they nor the state can afford the cost of reclamation as easily as the owner of the coal. Surely the owner of the coal, who will derive substantial income from the mining of his coal, can and should contribute to the restoration of

the surface whose productivity has been destroyed by the extraction of his coal.

Mr. Ernst of Basin Electric, in his report to this committee last fall, said that in North Dakota the owner of the coal gets about \$2,000 per acre for coal extraction royalties, yet the consumer (public) pays for the reclamation through increased power rates. Mr. Ernst recommends that either the landowner who is evidently also the coal owner share in the cost of reclamation or that the land be dedicated to public ownership. Here in Montana, where the landowner is seldom the coal owner, perhaps the coal owner should pay for the reclamation. This would encourage the coal industry, since they would be paid by the coal owner for any reclamation done by them and would not give justification to removing the land from private ownership, since no public money would be spent in reclamation. The land would revert back to the previous surface owner and remain on the tax rolls. A possible variation of this could be a "cost-sharing" program between the owner and the operator.

While it is perhaps beyond the scope of this committee, I would like to bring up another point. Several landowners have expressed their concern to me about the extensive core drill holes on their land. Since, as I stated before, these surface owners don't own the subsurface, they are hesitant about their right to require the drillers to plug or case these holes. There are as many as 30 to 40 holes per section, and there is definite concern about the effect that these unplugged, uncased holes will have on the quality and quantity of the surface water and ground water present on and under their land. There is evidence (according to one landowner) that the mixing of water strata is substantially affecting water quality already. I am told that a permit is required and that certain provisions must be met on federal lands. Here again, I am told the Bureau of Land Management in Miles City has not had any applications on many areas that have been and are being drilled. I do not know what provisions exist for plugging or casing holes on state or private lands, but perhaps there are some and this should be looked into.

In summary, I would:

1. Like to commend the committee for considering the surface owner's wishes in reclamation plans, but would recommend a jointly agreeable plan of the coal company and the surface owner be submitted for the approval of the administrator and the council.

2. Recommend that consideration be given to having the coal owner financially responsible for the surface reclamation on strip mines that extract his coal.

3. Request that the possible deleterious effects of leaving core drill holes unplugged and uncased be investigated.

4. Stress that, all good intentions aside, the law must be adequate, must be specific, and must be enforceable if we are to avoid the wasteland we have seen elsewhere and in the past.

5. Like to again mention that every effort should be made to recover the second vein of coal, which in spite of some technical difficulties is, I believe, entirely possible.

In conclusion I would like to compliment the committee for their dedication in dealing with a difficult subject which will not only encourage industry to utilize our mineral resources in Montana, but will minimize the damages that could occur and adversely affect the lives of our people for decades to come.

QUESTIONS:

THE CHAIRMAN. Vic, I would like to ask you this question. You mentioned the core drilling. This has been a problem in Montana for many years. I think policy is handled by the Oil and Gas Commission so as to prevent the intermingling of water of different quality in oil tests or for other minerals. Why this has not been enforced, I'm not quite sure. What would be your opinion of giving this responsibility to the State Water Board to review and police?

REPRESENTATIVE EAST. Well, at this moment, Mr. Chairman, I suspect that very likely they would be the logical board to take care of this matter. I really haven't given it a great deal of thought.

THE CHAIRMAN. I haven't either, but I think there is an area here of sad neglect.

REPRESENTATIVE EAST. I think so.

THE CHAIRMAN. Any other questions? Vic, you are getting away easy. At this time we'll take a 15-minute break for coffee. As soon as we get back, at 3:45 p.m., I will call on Mr. Leonard Lively.

COFFEEBREAK

THE CHAIRMAN. In order to correct our record, a previous witness, Mr. Dick Hodder, has asked for time to correct a misstatement.

MR. HODDER. I think I mentioned that Rosebud Coal Sales and Pacific Power & Light Company were cooperating with us in reclamation

work. This is not quite right; we do not have money in hand from these two companies.

They are working together at Decker, and we are negotiating. They intend to cooperate with us on our reclamation research, but as yet a project has not been established.

THE CHAIRMAN. Dick, would you repeat again the companies or groups cooperating with you.

MR. HODDER. The present cooperating companies are Western Energy, Knife River Coal Company, and Peabody Coal Company; in addition, the Montana Bureau of Mines and Geology and the U. S. Bureau of Mines. Now, I hope I didn't leave anyone out.

THE CHAIRMAN. Thank you, Dick. Mr. Lively of the Southwestern Montana Mining Association is next.

LEONARD LIVELY. My name is Leonard Lively. I am president of the Southwestern Montana Mining Association, which is an association of small miners and people interested in mining in that area.

His Excellency, Governor Anderson, distinguished Legislators, Ladies and Gentlemen.

We appreciated the opportunity of presenting a statement of our views, ideas, and suggestions at the November 9 and 10, 1969, conference. At this time we would like to restate our past position with amendments that seem in order, keeping in mind pollution problems and advancing technology. Neither this association, the United States Bureau of Mines, or the mineral industry can see an adequate supply of minerals or mineral fuels beyond the end of the coming decade. Certainly the world's growing population and the demand for a higher standard of living will deplete our known reserves. Therefore, we must search for and discover new mineral deposits. Mother Nature hides these deposits well. The right of the discoverer to the ownership of the mineral deposit has been the motivating force behind the discovery of a major portion of the mines in the past. Even today, large mines almost always grow from small ones. A recent example is the search for uranium. In 1945 uranium reserves were almost nil. Because of a sudden demand for the mineral and in the framework of the present mining laws, the United States is a uranium-rich nation. This is further evidence that the existing mining laws provide the incentive necessary for mineral discovery.

The U. S. Bureau of Mines, after a prolonged study, stated that from the years 1968 to 2000 the United States alone will consume more raw minerals than the whole world has produced prior to 1968 (this

statement was made by the Bureau director at the Northwest Mining Association meeting in Spokane, Washington, in 1969). With this tremendous demand for minerals, it is folly and could be a national calamity to make laws which forbid the continual search and production of raw minerals. This incentive we now have in our land; that discovery gives a right of ownership to mineral wealth in the public land has been mainly responsible for the great mineral wealth of our nation.

It therefore seems plausible that legislation should be directed toward the orderly search, development, and production of our mineral resources at this time in order to provide as much mineral as possible for the immediate future generations.

Attention is further called to the fact that when compared to the total area of the state, the percentage of mineral area in the state is very small. Actually, economic concentrations of minerals are the very rare exceptions. The state should count its good fortune when and if a mineral find is made.

Therefore, the legislation we are now considering will have a profound effect on the near future. This is serious, because without minerals we will face questions such as who will be able to drive automobiles. A privileged few who are relatively rich? Or the majority of the people? Who are we most interested in? The same is true for houses, communications, and so on. Mineral wealth makes all of these items possible.

As to mining law, this association concludes that:

The Mining Law of 1872, complemented by the State of Montana Mining Laws, is basically sound, and no wide departure from it should be instituted. The right of discovery must be retained under any revision. It is recognized that the required digging of discovery pits must be terminated. Indiscriminate dozer prospecting must be, in the best interests of conservation as deemed by a prudent man, followed by restoration of the surface.

Our state is only endowed with mineral treasures within very limited areas; these areas should remain open for prospecting and not restricted by recreation, scenic resources, and other selfish interests, but should remain open to multiple use. Because of inadequate revenue, if any, derived from the present leasing policy of state lands for minerals, we submit that such land should be thrown open to mineral location, the same as federal lands.

As to mined-land reclamation, we submit that a three-man commission be appointed by the Governor, perhaps named "The Mined-Land Reclamation Commission," which would have the responsibility

of assessing the surface values as against the mineral values. One man should represent labor, one represent the mining industry, and one the public.

As an alternative for this commission, especially pertaining to dredging, the mine operator should only be required to reclaim to a reasonable degree, such as the land being able to support the original vegetation.

In the interests of conserving the land surface, this association favors the use of geochemical and geophysical prospecting methods as legal evidence of discovery and also as being applicable to annual representation work.

We encourage the filing of annual representation work and discourage the indiscriminate location of large blocks of mining claims for apparently dubious reasons that lack full legal requirements of discovery. This procedure often results in knowingly or unknowingly staking someone else's ground, and the association feels that there is not a satisfactory procedure in the state for handling cases of staking over someone else's ground.

In an effort to overcome the objection that located claims are inadequately described as to their position, we submit that a plan map of a 160-acre area which positions a claim corner to the nearest section corner or quarter corner by a survey description be required for every claim staked out in land which has been surveyed by the public land survey. This map is to be filed with the Certificate of Location at the county courthouse. Further misunderstanding could also be avoided if it were required to maintain one's claim corners at all times.

Land reclamation governed by a rigid law would not permit resourceful utilization of our mineral resources. For instance, one could certainly not place as much value on surface resources on a desert as on a rich and productive agricultural valley.

In the interest of passing along vital information, it is estimated that in the spring of 1970, well under 200 mining engineers will graduate from our nation's colleges. Of these few, half of them will return to their native lands. Clearly the image of the mineral industry must be enhanced, and ultraconservative legislation does not promote the enhancement of this vital industry.

Montana is witnessing a rebirth of mineral exploration by many major mining companies. Undoubtedly, excepting Alaska, which has numerous adversities, Montana is the last "Mineral Frontier." Last year it received more than its share of attention. With a favorable

atmosphere for industrial development, this great state will surpass its past production of mineral wealth for many years to come.

Clearly much must be done, and the time is short. Adequately meeting our "mineral responsibilities" will require the utmost utilization of our human and mineral resources.

In conclusion, we respectfully submit that only an adequate mineral supply will supply (1) our continued and improved standard of living, and (2) the commodities vital to our national defense and well being.

We in Montana share in this responsibility.

Senator McGowan, you may remember that last year we suggested a three-member commission be appointed by the Governor. At that time you said you didn't have very good luck with commissioners. We still suggest that an actual mining man with production and operating experience be appointed to the committee in place of a duly elected public official, so that we do not have a complete committee of bureaucratic employees.

(Comment from background: Bravo!)

THE CHAIRMAN. Any questions? You must have done it well, Mr. Lively.

MR. LIVELY. I thank you for the opportunity.

THE CHAIRMAN. Before we go any further, is there anyone else who wants to make their statement today? Anyone who has to leave for any reason?

At this time we will call on Mr. C. P. Davenport of Pacific Power & Light Company, Portland, Oregon. We are happy to have you here.

MR. C. P. DAVENPORT. Mr. Chairman, Members of the Committee. My name is C. P. Davenport. I am a vice president of Pacific Power & Light Company, which headquarters in Portland.

You have asked for our comments in regard to the recommendations listed on pages 59 to 61 of the Proceedings of this committee's 1969 meeting. We have no comments on Recommendations I through IV, since my company's sole interest in this particular matter is concerned with Recommendation V, which relates to strip mining of coal and the reclamation of lands affected.

Pacific Power & Light Company will soon be involved in a joint venture with Peter Kiewit Sons, Inc., for the development of a strip

coal mine in southern Big Horn County, Montana. Neither Pacific nor Kiewit find the recommendations under V to be unreasonable. Both companies are not only fully dedicated to all reasonable and practical strip mined-land reclamation, but are implementing at this time such practices in their individual and separate strip mine developments.

We have some reservations on part 2 of Recommendation V, in which the note refers to the inclusion of the appropriate parts of the 1969 law as amendments of the 1967 law. At this point in time, of course, we do not know what parts of the 1969 law will be used, and therefore we hope that at sometime in the future this matter will be defined more specifically so that we might have the opportunity to comment, if appropriate.

In summary, we strongly feel that strip coal-mined areas must be properly reclaimed to their highest practical use commensurate with local conditions. We intend not only to be good neighbors and responsible miners, but indeed plan to be proud of our reclamation accomplishments during and after mining.

I told you, Mr. Chairman, that my statement would be short, and I think I have been short. I would be glad to respond to any questions from you or from your committee.

QUESTIONS:

THE CHAIRMAN. I have a question, Mr. Davenport. Would you please explain to me at least, for I had a number of people ask, is Peter Kiewit and Pacific Power & Light one and the same company?

MR. DAVENPORT. There is no corporate relationship between Pacific Power & Light Company, which operates the electric utility here in the Flathead Valley and also their telephone service. The headquarters of Peter Kiewit and Sons are in Omaha, Nebraska, and it is basically a contracting firm. They have two subsidiaries that mine coal in Wyoming, the Rosebud Coal Sales Company down near Hanna and Bighorn Coal Company operating out of Sheridan. Rosebud Coal Sales, while operating out of Hanna, has a small mine called the Tongue River mine in Big Horn County, Montana. The Pacific Power & Light Company has taken a portion of its coal reserves near Decker and combined them with some coal reserves of Peter Kiewit Company, and together we are going to joint venture in commercial coal production. Other than that, which is a very recent development, there has been no relationship between the two firms. Nor is there any other than this mining venture.

SENATOR RUGG. You may not be able to answer this question, Mr. Davenport, but I understand that down in the Decker area, where you are starting to mine, the top seam of coal is about 70 feet thick, and

there is an interval and under that is another layer of coal. I have been trying to visualize what process of reclamation would work where you take out, say, 100 feet of coal and then put the overburden back. I think it's different than when you take out 20 feet, because you have an effective lowering of the surface.

MR. DAVENPORT. Well, unfortunately we don't have the 100 feet of coal, but we will be mining eventually an area where we might well have a cut approaching 100 feet, beneath which we might have 70 to 80 feet of coal. It would be a matter of putting the overburden back into the excavation. You have an initial problem relative to the first cut or hole; here the overburden must be stacked to the side. Once you get it going, however, if you move . . . you are successively placing the overburden being removed into an area that you have just completed mining.

THE CHAIRMAN. Does that answer your question, Glen?

MR. DAVENPORT. The hypothesis is that we have a 200-foot hole or cut and only 100 feet of material going back in.

SENATOR RUGG. In other words, where you took out this much coal?

MR. DAVENPORT. To the best of my knowledge, neither Pacific Power nor Peter Kiewit has stripped a 100-foot seam beneath 100 feet of overburden. But the reclamation and treatment given to this would be part of the reclamation plan, which can be properly conceived only after your mining plan is defined.

SENATOR MITCHELL. May I ask the destination of the coal you will be mining?

MR. DAVENPORT. Our Decker operations to this point have been for test purposes only. We have moved something on the order of 70,000 tons of coal, most of which has gone to Chicago for test burning in an existing plant at Consolidated Edison. Where the long-term production will be going is a matter that I hope will be finalized in the very near future. We don't have a line going yet, because we haven't really sold the coal.

THE CHAIRMAN. Thank you, Mr. Davenport. We will now call Mr. Lloyd Ernst of the Basin Electric Company.

LLOYD ERNST. Mr. Chairman and Members of the Committee. It is a pleasure to be back with you once again and to listen to these deliberations. I think you are going about it very seriously and very well.

My principal reason for coming here is to make a couple of comments regarding the slide presentation, and these are in no way critical comments. I appreciate the fact that the gentleman referred to our program of leveling as very extensive. Certainly the slides did indicate that the growth is somewhat disappointing, and I assure you we above all else are disappointed in that it is not more rapid. We can explain this, however, by the fact that the soil chemistry is almost toxic to plant life. This is very high in sodium and sodium is an element which forms various salts which do not support plant growth. We researched this problem last summer, hoping to find some practical solution, but again I regret to say we do not have conclusive evidence or findings as to what might be the best or most practical way to change the soil chemistry to make it more conducive to plant growth.

The foregoing bears out what all of us have said time and time again--that there is a very great need for agency-coordinated research, to make such research meaningful and get it done as fast as possible.

With respect to Recommendation V, I would say only this: We are not certain why the State of Montana is electing to go the contract method as opposed to simple regulatory methods as are employed in North Dakota. Speaking personally now, it seems simpler than going the contract route. You undoubtedly have your reasons, and I bring this out just because I don't understand them. I also fail to understand what the term of the contract is. Is it perpetual? There are now several drafts of this contract, and perhaps this is clarified in the second draft. It seems clear to me that the contract does not require leveling. Some months ago, I wrote an interpretation of that contract at the request of Mr. Schwinden. That letter was an analysis of the contract as I saw it. I'm certain the contract is available to this committee, so I won't take time in going into it here. Those are my comments, and I appreciate the opportunity to be here.

QUESTIONS:

REPRESENTATIVE JORDAN. Mr. Ernst, could you tell me, is Basin Electric involved in coal mining now?

MR. ERNST. No, we are not, though we pay a good part of the reclamation bill.

REPRESENTATIVE JORDAN. Is Truax Traer doing any mining in Montana?

MR. ERNST. Truax Traer is a division of Consolidation Coal Company. I understand Consolidation is doing quite a bit of mining over here.

REPRESENTATIVE JORDAN. Is this in conjunction with Truax operations in North Dakota.

MR. ERNST. No, but our interest lies primarily in future power generation here, and as such we would be affected by the reclamation law.

REPRESENTATIVE JORDAN. Thank you, sir.

QUESTIONS:

SENATOR MITCHELL. You brought up an interesting question there. I was wondering, Mr. Chairman, if perhaps either you or our executive secretary could answer his question relative to the contract versus the regulatory approach.

THE CHAIRMAN. I think, Mr. Ernst, that the gentleman from the Bureau of Indian Affairs who testified this morning carried our point. I am of the opinion that Montana's coal lies over a larger area than in North Dakota. There are greater differences in topography and overburden and climate. Many of us feel it is next to impossible to write exact reclamation plans and specifications into law. There may be 200 miles or more between mines, and I believe that the type of reclamation will vary from one area to another. This reclamation may range from recreation, where water is available, to grazing, farming, etc. So, at this point I think we have to let each area stand on its merits.

I do not know all the differences from North Dakota, but I'm sure that there is a wider variation of conditions in Montana. I'm just a farm boy, but one thing occurred to me when we visited your operation last summer . . . In your rolling countryside that you have mentioned, the way you are reclaiming your land, the type of toxic soil, etc. . . . I thought by the time you have leveled the spoils with graders and bulldozers, you have a soil that becomes like cement. Maybe with less compaction you would get a better growth of vegetation. But this is your business, and you know more about it than I do.

MR. ERNST. I appreciate that question, and this was the subject of some discussion with the experts with whom we are working. They feel that if you can't get this material to support vegetation on a gentler slope than the regular spoil, it certainly wouldn't support it on a steeper slope.

They (the experts) bring out that the sodium is free to react with clay and other materials to form a cementlike substance anyway. This happens whether it is in a steep slope or a gentle rolling topography. With the addition of some moisture, this seems to take place whether you compact it or not. We are not prepared to say that leveling does not

result in greater compaction. It may very well do that--we just don't know yet, but we are trying to find out as quickly as we can.

DR. GROFF. I would like to comment on Senator Harry's and Lloyd's question. A major reason why the contract system is preferable in Montana is this: From the technical standpoint we are dealing with about four times as many mineral commodities as North Dakota. We have not only coal, but bentonite, possibly uranium, sand and gravel, phosphate rock, maybe salt cake, commercial clay, and probably some others. Actually we know very little about initial reclamation procedures on any of these surface mineable minerals. We believe the contract system much more versatile and is flexible enough to fit a wide variety of differing conditions.

THE CHAIRMAN. Thank you. For the record, as Sid knows, I initially had the same opinion as you have, Lloyd; that is, relative to the contract. I thought it should be regulatory, and this is one of the areas where Sid's arguments brought me around. I think he is probably right, at least on this particular issue.

MR. ERNST. Please do not misunderstand me, I was not being critical. It was just not clear to us.

SENATOR MITCHELL. Well, I realized this and that is why I asked the question, not so much for my information but for yours and for the people observing here. There is a difference, and I think the contract method is superior.

REPRESENTATIVE JORDAN. Nice to know the gentleman can change his mind.

THE CHAIRMAN. Thank you. If there are no further questions, Mr. Ernst, you are excused. I would like now to call on Mr. Douglas Smith. Are you ready yet, sir?

DOUGLAS SMITH. Ron Guse will make the presentation for the Water Resources Board.

RON GUSE. Thank you, Senator. If we can get Representative Romney over there to put away his knife, we can get started. Mr. Chairman, and Distinguished Members of this Committee, and Ladies and Gentlemen. My name is Ronald Guse, and I am director of the Water Resources Division of the Montana Water Resources Board. The statement I have to present today is on behalf of the Montana Water Resources Board.

I think it is in order to commend those who had a part in preparing the present draft of the Surface Coal-Mined-Land Reclamation Contract;

namely, the Governor's Conference Committee, the Governor's Council on Natural Resources and Development, and the Advisory Committee on Mined-Land Reclamation.

We realize and appreciate the time and effort which have been expended in preparation of the document, since it is imperative at this time that suitable legislation be prepared to guarantee that the development of our rich eastern Montana coal resource be advantageous to our developing economy and not a disastrous consequence of surface mining.

Montana has met the responsibility of providing a means of reclaiming surface-mined lands. It may not be the best, but it is a very excellent beginning, as the present draft so well reflects.

Several very important areas in the draft reclamation contract will have to be resolved before the document will be completed. There seems to be some disagreement in the area of operators submitting a reclamation plan before mining.

Maybe a close review and consideration of Recommendation V, 8b, is needed as set forth in the report titled Proceedings and Recommendations of the 1969 Governor's Conference on Mined-Land Reclamation and Montana Mining Law.

(8) The administrator shall:

b. Arrange for a preliminary flexible reclamation plan to be submitted by the operator to the administrator and thence taken to the council for review and approval. Acceptable changes may be made in any such plan to meet local situations or unforeseen conditions. The preliminary reclamation plan will, when practical, be submitted prior to the start of actual mining operations. A final reclamation plan may be submitted at a later time at the option of either the administrator or the operator. It is the sense of the legislature that an operator be allowed to make reasonable changes in a reclamation plan if there are good and valid reasons for so doing.

In any event, no plan or contract shall be held more than 60 days for review by either the administrator or the council or both.

On July 31, 1970, Governor Anderson wrote to the chairman of the Council on Natural Resources and Development emphasizing the importance of federal-state agreement on reclamation contracts applicable to strip coal-mine operators.

It's imperative that a reclamation contract be developed with standards which would be uniformly applied to coal operators on state, federal, and private coal lands. These standards should be extended where possible on a regional basis.

The Water Resources Board stresses that laws can recognize and permit operations which tend to increase the available amount of usable fresh water resources, as surface mining operations provide, but should also contain safeguards to protect existing water quality and quantity. The construction of water storage facilities as a means of increasing the amount of available fresh water, controlling the resource, and replacing consumed water, may be an asset in the conservation and wise use of water, providing this does not have a detrimental effect on existing water supplies and does not impair existing rights.

Montana's natural resources should be developed for the benefit of all Montanans, and we feel confident that proposed mined-land reclamation and mining laws will aid to uphold those expectations.

I have some additional comments, Mr. Chairman. There are no comments to make on the new recommendations, although our board members have had a chance to review them. They will submit their comments prior to October 20. The Council of Natural Resources will also review the new recommendations and submit their comments.

One item I would like to add to the discussion relative to who should be the administrator of the proposed mined-land reclamation laws--the Water Resources Board presently has on its staff an economist, several engineers, a soil scientist, and a geologist, plus several staff members well versed on surface and ground-water rights. I toss this out for your information in case you are not aware of it. We would hope the Water Resources Board would be given consideration in this very important matter. At this time, Mr. Chairman, I would like to thank you and your committee for this opportunity to make our views known. That is all I have, sir.

QUESTIONS:

REPRESENTATIVE ROMNEY. Mr. Guse, in your statement just made, I'm very much interested in it. You also, I assume, have at various places Montana equipment which could be used if necessary. Is that correct?

MR. GUSE. Yes, sir, that is correct. As many of you know, we did have a large shop located at . . . which is being phased out, and all the equipment has been sold to various agencies. At the present time, we do have a field office located in the Bitterroot Valley near Hamilton. This is our largest operation. We do have construction machinery there, such as large trucks, cats, graders, etc. Although we are not in the construction business as such, as we were 40 or 50 years ago, we do have enough equipment for maintenance on our projects.

REPRESENTATIVE JORDAN. Concerning this facility which you have in the Bitterroot Valley near Hamilton, I assume you would have to relocate that if you were going to work in the strip-mined areas, since there is no coal in the area of Hamilton.

MR. GUSE. Yes, sir, that is also correct, but possibly in this case you might have to go to contracting to some agency or construction firm. It's possible that we could not accept this undertaking with the facility we presently have.

SENATOR MITCHELL. Are you suggesting that the Water Resources Board and/or the state government actively get into the field of reclamation, as opposed to having the mining company do this restoration, and the Water Resources Board or a state agency be the enforcer and administrator? Now are you advocating the first one?

MR. GUSE. No, sir, I am not. I am speaking of the administration only, but if a case did come where we had to go in and reclaim, I think we could possibly do this also. Our main concern here is administrative.

REPRESENTATIVE ROMNEY. However, Mr. Guse, if I understand you correctly, your organization does have engineers who could go into this in depth and would be familiar with the proper procedures, something that perhaps any other administrative agency in the state of Montana does not possess at this time?

SENATOR MITCHELL. Before we go any further, let me throw this in. Would you tell us the criteria on composition of the Water Resources Board?

MR. GUSE. Well, of course I'll start at the top with the Governor and our director, who is appointed by the Governor. Below the director we presently have four divisions, administration, engineering, planning, and water resources. In the engineering division we have seven engineers who are very competent in this area, and we are working on several conservancy area districts up on the Hi-Line and also in the area of McCone and Richland Counties, etc., in that area. In planning, we do have several soil scientists . . . in the soil classification section. In water resources, we have a geologist, and of course some very competent personnel in surface- and ground-water rights. I think that pretty well covers it, sir.

REPRESENTATIVE JORDAN. In connection with Senator Mitchell's query, do you currently have the facilities? Or are you advocating that you get into the construction business?

MR. GUSE. No, I don't think we will get into the construction business. We are trying to phase this out. If you are familiar with the history of the Water Resources Board, we just take on the duties of the state engineer and also the Water Conservation Board. These were combined into the Montana Water Resources Board, and since the last year or so, we are phasing out of construction, having just enough machinery for our projects. Our diversion ditches over in Ravalli County are one of our largest projects, and that is why we do have our office in that area.

SENATOR MITCHELL. Back to the Water Board, what is the criteria for appointment? By this, I am referring to certain areas of the state with not more than three from any one political party. What kind of experience do they have to have, and things like this? I am trying to relate all this to how their background might fit into the reclamation program.

MR. GUSE. Are you referring to the board members?

SENATOR MITCHELL. Yes.

MR. GUSE. Well, I'm not sure. I can't sit here and quote the law. The representatives are from throughout the state. We have one from Ravalli County, some from the Hi-Line, some from eastern Montana, and also from the Musselshell area. So they are pretty well scattered throughout the state. I think they pretty well represent all facets, agriculture and mining, and probably more agriculture than anything else.

THE CHAIRMAN. Mr. Guse, I'd like to ask you this question in regard to what you just said. This is an area for new thought, and I'm sure you have some prominent people, but I don't think you have a mining engineer on your staff, do you? Or do you think you should have one in this type of endeavor?

MR. GUSE. Well, I don't think you would have to have a mining engineer. We do have a civil engineer and design engineer at the present time. We do have plans for additional engineers on the staff, and if we do need a mining engineer, we could put one on. But with the engineers we do have and the geologists, I think this would be sufficient.

THE CHAIRMAN. While we are kicking this around, I would like to express my personal feeling that we are going to have to have a pretty highly qualified and experienced person, and I know what happens in Montana every two or four years--this is what disturbs me. If we get the type of fellow we are talking about and looking for in any department with a salary that will attract him in the first place, the next question is, he wants to know what happens with a change of administration. Is he going

to have a job or isn't he? Past experience with boards, bureaus, and commissions has shown that many good people go down the drain. Have you some suggestions as to how he can have some tenure, yet keeping in line with our political system? I realize that no one is supposed to be perpetuated in a job forever, especially if they aren't doing their job.

MR. GUSE. I'm sure I would agree with you, Senator McGowan. I'm sure this is one of the biggest hangups. I don't have any definite ideas in what we could do in this area. Maybe we could hire a person who would not be appointed politically. I think maybe the best solution is to go to an agency such as this.

DR. GROFF. I see Doug Smith, the Water Resources Board director, back there. Doug, I may owe you an apology. The reason why you weren't considered for this in the first place is that we had no idea that you were interested. (Laughter.)

DOUG SMITH. Well, I think you know we are now, Sid.

THE CHAIRMAN. I would like to thank you, Mr. Guse. I say we are here with open minds, and none of us knows which way we are going at this juncture, but that is why we are here--to get suggestions and comments.

Now, all of you are aware that we set this hearing for today and tomorrow. I'm sure there will be people here tomorrow. We will be here taking testimony.

One of our committee wants Mr. Bernfeld to come back for a few minutes (laughter in the background) . . . We will give you all the protection you need.

REPRESENTATIVE JORDAN. Mr. Bernfeld, some of the comments you made during your dissertation concerning the committee and the activities that have been undertaken by the committee, about a new concept, at least to me, in giving consideration over the span of time that the mining is going on, I'm not certain that the committee--at least I didn't--follow all of it. I would like to hear you elaborate or expound on that one portion if you would, please.

MR. BERNFELD. Surely, I believe the statement to which you are referring relates to this fact. At the opening of a mining project at the time, say, of applying for your right to do it and to be required to commit yourself to some sort of reclamation plan, no mining company would know, neither would the state--nobody could possibly know--what the best possible use for that land would be 40 or 50 years from that time. That is the reason I said we were very much in favor of the flexible

contract method you are using. This would allow the state, as techniques developed, as the mine itself developed, as the character of the community might change, to vary the requirements.

For example, getting away from coal mining for a moment, other mines develop by strip processes too. Take any strip mine. First of all, when a mine comes in a community is born.. The workers at the mine have homes, people move in to serve them in various businesses, schools develop, and when the community is growing, its people start thinking about recreational uses and making provisions for parks, etc. All of this will take place in the course of stripping this particular area. You may find at the end of 50 years that the wrong thing to do would be to put the area back into grazing lands or forests. It might be best suited for industrial or some other use, particularly if the soil chemistry won't support vegetation of a practical value.

Several witnesses testified today, and many agreed with my earlier statement of today that when the land has its minerals removed and its porosity and water content changed, no one knows in advance if this soil will support grass, trees, or other plants of value. So I say again, the only way in which a concrete result can be achieved is to require the operator to commit himself to reclamation procedures with the top price (land value before mining) so he knows what the liability is and he can get his bond.

The provisions of this setup can be changed from time to time as the administrator or the public demand requires. Also, if the top limit is settled on the basis of, let's say, land value destroyed in the course of mining, you can take the limit of absolute destruction if you want to . . . for the top cost of reclamation later or for the use which then costs more than the ultimate liability to which the operator committed himself. Then I think it becomes a matter for the public concern and for the general funds of the state to bring the use which then is best. Otherwise what happens is this, you find an ore body, you make your liability studies, and it may very seriously affect the economics of a mineral deposit. A mineral deposit having so many foreseeable dollars in capital expenditures and so many foreseeable dollars in operations, etc., must now have more dollars added for reclamation. If the company involved doesn't have a fairly definite figure on that, they can't take the risk, because what they can afford to put into the project is directly related to the price they get for the mineral.

Now, mineral markets fluctuate up and down and the mining companies try to level this out in their estimates, but it all comes back to this--you must figure all of your costs. The actual top cost of reclamation must be settled, from the point of view of the miner's economics, from that of the insuring company who supplies the bond, and from that of the state.

REPRESENTATIVE JORDAN. As a hypothetical situation, say that you were entering into a contract with the Bureau (Bureau of Mines) and the reclamation value was established at \$200 per acre, and say the mining operations would run for 40 years. Would the monies then be held in trust concerning reclamation? Would reclamation be started at some date, say within 5 years of the opening of the mine, so that you would have continuous reclamation going along as the mine was progressing? Or would you hold this money in trust until mining was completed in 45 years hence, then start a reclamation project for whatever was desired at that time?

MR. BERNFELD. As a practical matter, what would happen is this. If, as the project developed, it became either advisable or necessary to partially reclaim as you mined, for instance as in a coal mine where we just progressively move along over a large area, this is perhaps feasible. I am not a coal expert so I don't know. But in the phosphate operation that I mentioned earlier today, you may or may not be able to reclaim progressively. In Florida phosphate mining, what you do is backfill the pit as you go; the water will run in from the water table and you couldn't just take it up in one operation--you'd have to do it in sections.

As far as a reserve of money goes, I think every company is just like any businessman and takes action to create a reserve against future expense. The purpose of the bond relates to the fact that the company seeking the bond has insufficient finances to handle it themselves. Then you have the surety to go against, and when you claim against it, the surety hires the contractor to do the work the miner should have done. But the surety company, I can almost guarantee you, is not going to issue such a bond unless that company is rock sound, because of the huge liability that goes along with it.

REPRESENTATIVE JORDAN. You are more conversant, I'm sure, on surety bonds than I am, although I have had some experience.

MR. BERNFELD. Noncriminal (laughter).

REPRESENTATIVE JORDAN. All right (chuckle). What I'm inquiring about here is that surety bonds are issued, but I don't know if they would be issued on a contract basis for a 40-year span or if they would be renewable in a certain interval of years. I wonder if you could have continuity of a surety bond once your mining operation commences.

MR. BERNFELD. I don't think anyone, or surety companies themselves, have yet worked out the full mechanics. What would normally happen, with both federal and state organizations contemplated, is this, the mining company would take out a surety bond which would be good for the life of the project so far as the state is concerned. The

mining company would pay an annual premium. Usually in surety bonds that have a prospective fluctuating nature, the surety company would reserve the right to adjust that rate--open ended. You couldn't expect them to stay in business if they didn't. This is why I thought perhaps that not enough attention was paid to the principal of requiring a surety bond. If this is to be worked out so that the result and availability of the bond is known exactly, then the biggest factor of all is to set a top on the liability, otherwise the surety cost is fantastic. This is because the bonding company must protect itself against the highest possible liability.

REPRESENTATIVE JORDAN. I would like to ask an extemporaneous opinion of this gentleman concerning this draft copy of the surface coal-mine reclamation contract brought in by Dr. Silverman. On page 5 of that contract, under I, it states "the operator shall be required to engage a recognized authority on archeology to survey and salvage archeological values found within the boundaries of the lease, well in advance of mining. The individual engaged to make a survey and salvage will be recognized as an authority on archeology by the Society of American Archeology. The responsibility and cost of this survey and salvage will be that of the operator." Would you give me an extemporaneous guess of what impact that might have on your industry.

MR. BERNFELD. I don't think it would have much of a financial impact on it, and I don't think it would stop anyone from mining, but offhand I think it is too vague. What is the science of archeology? Where does digging divide earth material from shards of archeological interest? For example, I have been out on the hills any number of times and found pieces of Indian pottery. I've picked up one or two samples and taken them home and left the rest there. I think if you are going to put something like this in the contract, you must do more defining as to what constitutes an archeological artifact. For example, a miner is not an archeologist, but he may dig out a bunch of dinosaur bones without knowing what they are. Is he going to be responsible or do you have to have a zoologist or whoever it should be sitting right on the mine site to identify those bones? In the course of digging in these lands, I'm sure you may dig up bones. I've found Indian skulls and other things around the prairie.

REPRESENTATIVE JORDAN. The way the thing reads, they would have an archeological survey and salvage done and completed prior to mine operations.

MR. BERNFELD. I fail to see how an archeologist, just from the surface, can tell what is underneath it anymore than a miner can.

REPRESENTATIVE JORDAN. I would assume it would mean excavation.

MR. BERNFELD. Well, the archeologist has no basis, even for an opinion, until he sees an artifact come out of the soil.

May I volunteer one item that has been under discussion here this afternoon? There seems to be quite a difference of opinion relative to the council arrangement with various arrangements of the state agencies against three particular agencies and so on. I think, from the questions that have been asked, there should be in this picture one really competent expert in reclamation.

To be utterly practical, we must recognize a tendency in governmental agencies, whether or not they intended to, to be partial to their own interests or the interest of that section of the public with which they are most usually concerned; that is, it is hard for a specialized agency to consider the problem on the basis of the best and widest general benefit. For this reason, the decisions must be made by one who is familiar with mining practices for one thing as well as conservation practices, after consultation of course, with all interested agencies. I wonder if you could get somebody like that on a contract basis. Require him to circulate among these departments, for their advice and discussion or recommendations, submitted plans, with the requirement that all of these departments come back with this advice in 45 days or so that it won't be hung up forever. And provide too, that he makes the decision, the other is merely advice, he makes the decision. This would preserve his independence to the greatest possible extent. If you gave him a contract good for, say, 6 or 8 years, and providing that he couldn't be removed, except for cause or something a little better, I think, perhaps, you could get the man you want, and he would have the responsibility of making the decision, not the advisory board, which, frankly, as you see among various people appearing before the committee, each one actually has his own axe to grind at times. Isn't that correct?

REPRESENTATIVE JORDAN. I'm afraid you're right.

MR. BERNFELD. So this fellow must be the judge, and that's your target--make this fellow as impartial as possible. He can listen, he can let it go through or he doesn't have to let it go through, but he makes the decision.

THE CHAIRMAN. Thank you. Thank you very much. Did one of you gentlemen back there (pointing) wish to come up here for a moment? Mr. Guse, did you have a comment here you wanted to clarify? Doug Smith, did you have a comment?

MR. SMITH. Senator, I think you can probably hear me from back here. The only comment I have relates to the question as to whether we (the Water Resources Board) are in the construction business. I

think Ron was probably referring to emergency measures is all. He was talking about technical competence and not getting into the construction area of reclamation. This is the only point I wanted to make. No, we're not in the construction business.

THE CHAIRMAN. Okay. Ladies and Gentlemen, it's now 5 o'clock and this conference will begin at 9 a.m. tomorrow morning. I thank you for your statements and the information you have presented to this committee.

SECOND DAY:

THOMAS GWYNN. After all this preparation, I hope that what I have to say is worth listening to. My remarks will be partly off the cuff and partly a report that I would like to read into the record, or at least part of it, and leave copies with the committee.

My name is Thomas Gwynn. I'm with Knife River Coal Mining Company, and I would like to start out by reading a portion of a spoil bank report . . . which was presided over by Committee Chairman Konrad Norstog of the North Dakota Wildlife Federation. I thought this would be of interest to you because for several years he has had the responsibility for the North Dakota Wildlife Federation studies of spoil-bank reclamation and the effects of it. I hesitate to read the entire report, but I would like to read appropriate portions.

Beulah mines--Knife River Coal Mining Company.--In accordance with state law, all current spoil banks are being capped to a width of 35 feet. They are then fertilized and seeded to grasses and legumes. Some experimentation has been done with spreading topsoil and manure. All sites viewed had a remarkable growth of grass and legumes. In some areas there was evidence of developing soil. The sides and troughs are then planted to various trees and shrubs (cedar, pine, Russian olive, plum, buffalo berry, Chinese elm, to mention a few). The north and east slopes show a success or survival rate approaching 70 percent. The south and west slopes seem to have a survival rate of about 40 percent or less. We viewed some areas in the north mine that had been planted to trees 5 to 10 years ago, and it appears that in time the cover will be quite substantial. At the present time the plan is to plant about 25,000 trees per year. This is a reduction from 50,000 in prior years. In some of the older workings, natural erosion has widened the troughs to widths ranging from 5 to 30 feet. Cottonwood and willow planted in these areas are doing quite well and are managing to grow faster than the rate of siltation. As in all areas covered on the tour, there was no indication of either acid or alkaline drainage, so much so in fact, that in the north mines west of State Highway 49, trout have been stocked and are doing well in a deep water-filled cut.

Wilton mine. --Here we had an opportunity to view what Mother Nature can accomplish if given enough time. The grass cover is from 2 to 3 feet tall in most areas. Naturally-seeded trees are growing in some areas. In one small area, extensive tree planting has been undertaken with outstanding results. This area surrounds a small lake of about $1\frac{1}{2}$ acres. There is a heavy growth of water plants around it, and the lake itself has been stocked with northern pike, bass, and perch. It is a privilege to hike and enjoy such an area.

Summary. --In summary we feel that it would be inadvisable to rule that all spoil banks be handled alike. There are too many different soil types to apply the same requirements to all areas. It might be advisable to have these areas reviewed by a knowledgeable individual or agency and charge them with making recommendations as to the proper methods of reclamation. Inasmuch as leveling to a rolling topography will cost approximately \$400 per acre, it would seem that economically there is little to gain and a lot to lose by reclaiming in this manner. This would seem to be particularly true in the case of the Basin rolling hills. The soil they have to work with is very tight knit and very susceptible to compaction. However, it might be well to wait a few years and see what the leveled area develops into. Of the spoil banks viewed, the ones left relatively rough have proved that they will become attractive areas. They will support a limited amount of grazing, but it must be recognized that the ecology of these areas is quite fragile and can very easily be destroyed. We can understand the concern of the landowners and the farmers living in the area where the spoil banks are located, but sometimes it would seem that the wise course would be to dedicate the use of these areas to wildlife and recreation. I believe it would be accurate to say that much of the USA is fast running out of areas suitable for both wildlife and recreation. There is much to be learned in the development of these areas, and it is hoped that no ill-advised and hasty action will be taken, as this could well result in the permanent destruction of the area.

Now, certainly there is a similarity between the mines in the area that Mr. Norstog is reporting on and the areas in eastern Montana. I might also add that about a month ago, following a long dry period in North Dakota, an air photo flight was taken over an area of mined-land reclamation. The photos taken are in an album which I have given to Sid Groff, loaned to him so the committee can look at them. I was impressed by the amount of water that has accumulated in the various mines, particularly those that have been left quite rough. Some of this water is of sufficient quality to allow the planting of trout, but I think we have to recognize that in states such as ours where water is a problem, that the ability of these spoils to trap and hold water is of importance. I don't want to go into this discussion too far, as I know we discussed it at our last meeting, and you have all the benefit of comments in the report included in the 1969 Proceedings.

This time I think I should comment on the recommendations of your committee. First of all, I'm impressed with the job that's being done and think the suggestions by and large are good recommendations. I would like to comment on Recommendation V, no. 4, concerning the establishment of the State Commissioner of Lands as the administrator of the law, or as indicated in the memorandum of new recommendations, the possibility of using someone who is qualified in this area. Certainly I feel that using a qualified person is an interesting approach and perhaps the best approach, whether he be the administrator or whether he be on the Land Commissioner's staff. It is quite important that you do have an expert dealing with the industry and overseeing this matter of reclamation in the state. I think the reason for this is obvious.

The next item deals with the establishment of the Advisory, Review, and Appeals Council. I want to say wholeheartedly that I agree with the concept of keeping this council small enough to be workable. Too many agencies can cause it to be unwieldy, and certainly the provisions of the recommendations (V, part 7) provide that all state agencies will coordinate any ideas or reclamation activities through the council. This does give an opportunity to the various state agencies to put in their recommendations on behalf of their respective expertise used in this area of reclamation.

I did have a comment on Recommendation V, part 8, though I have no serious reservations here. I was dubious as to the provision whereby the administrator may initiate a final place. I think it is obvious that as time goes on that it's possible that we may want to change or improve our method of reclamation. There may be reasons to even change the direction of it, but I'm wondering if there needs to be some protection for the operator against an entirely new plan being thrust upon him by the administrator. Now, perhaps he has enough protection by recourse to the council. That is one problem to cross my mind. I'm sure that when we have more exact wording on this that it can be reviewed and discussed as to how it will affect us.

The next question I have, and here again it's an area where we would all have to do a lot more thinking about--this deals with items 10 and 11, Recommendation V. I wonder if this isn't a double penalty and shouldn't the state be amply covered in one or the other. In regard to the bond, it seems to me that the bond should be sufficient, and this \$100 a day penalty just puts another burden on the operator. Maybe I should ask the question, just what does the committee have in mind?

THE CHAIRMAN. You are asking this question here?

MR. GWYNN. Yes.

THE CHAIRMAN. Well, I think that probably all contracts entered into by government or their agencies or enterprises, there is generally a penalty provided in case somebody isn't living up to their agreement. For example, the Highway. The Highway people let a contract for a certain date to start work, and every day after that date that they haven't started they're assessed a figure depending on the size of the contract. Whether this is good or bad, I'm not able to say. But I wouldn't be a bit surprised if it weren't taken out of a standard contract.

MR. GWYNN. Well, I think this is an area we'd like to study a little further. Perhaps the committee would like to look at this a little more, too. In my mind I can see situations that might make it difficult on the operator; for instance, if the request was made for some particular work to be done, even though it had been agreed upon. If the request were made at the time of year when it would be difficult for the operator to do it because of production schedules, I could see where it could work a hardship on the operator. So that \$100 per day penalty, if it is left in there, perhaps it should have some additional flexibility built into it to provide for the flexible nature of the operation. For instance, out in Savage this year we have been doing reclamation during the time when we don't have a rushing production schedule. When you get into the fall and winter, it's obvious there isn't going to be much reclamation done, if any. And there are times of the year when the operator has to have his equipment on something besides reclamation. The reclamation equipment-use allotment is worked into a schedule. That's what was in the back of my mind when I was reading the recommendation.

THE CHAIRMAN. Would it not be possible that the Board of Review would be able to determine whether this was practical or not at the time? Certainly, if it was below zero . . .

I think it's just a little protection related to those who aren't doing what they're supposed to be doing. But this is why we have a board that is supposed to be composed of reasonable people, to administer the law and to make allowances for things which no one can control.

MR. GWYNN. I think you're probably correct. I think we may need some sharper wording . . . These are the only comments I have on those--I think they have shaped up surprisingly well.

THE CHAIRMAN. Can I ask you a question? At this point we have had nobody say anything about the taxes levied on the coal, or about the rents and royalties, or what the states are accumulating from this. Would you, Mr. Gwynn, tell us what the operation in North Dakota is--how are your taxes based?

MR. GWYNN. Well, I'm sorry to say you have the wrong person here to really talk intelligently on this subject. I would rather not get into it, if it's all right with you. I just don't feel qualified to really discuss that one. The notes that I had last year, and I did discuss it somewhat, I do not have with me at this time, so I think I'd be going a little bit afield.

THE CHAIRMAN. Okay. Do you gentlemen have any questions?

REPRESENTATIVE ROMNEY. I am interested in that section of your testimony in which you spoke of the necessity of having someone with expertise as administrator. I would like to have you advise as to what you consider are the qualifications of a reclamationist. What is a reclamationist?

MR. GWYNN. Well, I think that probably the qualifications of an expert in this case, as has been alluded to by one or two persons before me, would include someone first of all who is acquainted with the mining industry so that he is aware of the inherent problems in mining, and secondly, one who has been involved enough in the actual field of conservation and reclamation so that he has some concept of what can be accomplished. A person who is aware, for instance, that you can't legislate . . . that you are going to have a 60-foot maple at such and such a location a year from today. Someone who is aware of the problems and time involved in bringing some of these areas back to vegetation or some other use. Also, I'm certain you'd want a person who is able to and willing to work with the various agencies and is broadminded enough to recognize that there may be many different types of reclamation possible, and that one thing may work in one place and not in another. A person who may recognize that in one area recreation and wildlife management may be the answer, and in another area it might be grazing, even bringing it back to farming and crops.

I think you are going to have to have a person who is broadminded and has a broad enough concept of the different types of reclamation and experience in them that he can follow whatever approach seems best in the particular area being mined.

REPRESENTATIVE ROMNEY. In other words, he doesn't have to be a Phi Beta Kappa or Dr. of Geology or something else. He just has to be a broadminded individual who is able to compromise and evaluate the proposition. Right?

MR. GWYNN. I think that's right. Knife River picked a geologist to do their job. I think they did it partly because of my farming background, but also because they felt I could approach the subject from a number of different aspects without being channeled too narrowly. I don't think that you have to have a college professor handle this program at all. In fact, there may be some inherent danger if you did.

REPRESENTATIVE ROMNEY. I notice there's a tendency of some people to think you should have a deep knowledge of mining. I don't think that's necessary. A person of normal intelligence ought to be able to tell whether the area is being wrecked or not and whether it is susceptible to regensis.

MR. GWYNN. I think it's important to have some knowledge of mining so that you can appreciate the problems of the company that you are dealing with, so that you won't be placing undue demands upon the mining operator. I think certainly a knowledge of mining is going to prepare this expert so that he can much better work with the operators.

REPRESENTATIVE ROMNEY. I noticed in some of the testimony yesterday that there was a deep and abiding fear of the ugly head of politics that could be reared in this matter of administration, and everyone was shrinking from it. Is it your view that we're ever going to be able to avoid the implication of politics in such a matter as this?

MR. GWYNN. I think whoever ends up in this position will find that he can't get away from politics. I think it's going to be a hot spot no matter who you have in there. But I think you do need to, as much as possible, protect the administrator from undue political pressure. This was mentioned by one or two people yesterday. I don't know just how you're going to accomplish this, but certainly the political pressure is a concern here. If you're going to have a man do an effective job, he's going to have to be able to operate somewhat free of these pressures, if that's at all possible.

REPRESENTATIVE ROMNEY. There are, perhaps, two prongs to this. One is to have the administrator a creature of the Governor's appointment, no matter who the Governor might be, and if he doesn't do a good job, the people have a tendency to throw the Governor out along with the administrator. The other way would be to have the appointment made for a long period of time, such as the federal government does with the director of the budget. The office could be held by that administrator for a good many years at a salary where he could avoid temptation. What do you think of the choice between these two possibilities?

MR. GWYNN. Well, in this era of reclamation control and environmental ecology, we're going to have a lot of pressure for a lot of years to come. When we're talking about reclamation of mined lands we're talking about a long-range thing. We aren't going to get results that will greatly impress people six months or two years after the program is commenced. So, I would think that whoever is brought into this program as administrator should have a long enough period of time to show what he can do. It may be that if he was there only two years, it's possible that five years later someone might say "b'gosh, his program looks pretty good." Then it would be starting to bear fruit.

This reclamation of mined lands is going to take a long time. If you're careful in picking the right kind of man, he could have some kind of protection for a period of time long enough to put his program across. I think if you keep changing programs every two years by putting in a new man, it's not going to get the job done.

REPRESENTATIVE ROMNEY. Going briefly into another field, I would like to know that if in your revegetation work, planting of trees, shrubs, grass, etc., has there been a surplus of weeds?

MR. GWYNN. Well, of course, as we told some of your people on our first stop in North Dakota last summer, you do have some weed cover which serves to start out and hold forth for two or three years and then starts to break down into the soil. The grass that you have planted then begins to establish itself. Our experience of several years shows that heavy grass cover will push out the weeds. We do have weed problems, as we start out under pretty sterile conditions when we first try to reclaim spoils. There's no way to get around it, you are going to go through a period of several years when weeds are going to be the best thing we can grow, and we're going to be thankful for them.

Mr. Hodder in his studies has shown that weed cover can be very desirable. So the fact that we have a weed cover to start with isn't particularly bad.

REPRESENTATIVE ROMNEY. Is there a possibility that at some future time you will be spraying these weeds to get rid of them?

MR. GWYNN. I doubt very much that we will spray to kill anything that's green on the spoil banks (laughter in the background).

SENATOR MITCHELL. Relative to the administrator, Mr. Chairman, I guess, if I understand the issue correctly, we have two approaches. One is to have an administrator that is insulated and removed from the problems of politics and public opinion, versus the other . . . one who is out in the sunlight, talking and visiting, etc. . . . Now, realizing that we can't have . . . How would it strike you that the administrator be in the Department of Lands or the Water Board?

Say your expert was protected by a civil service type appointment and was not subject to be thrown out by one political administration or another. But the head (of the department) would be subject to political pressure . . . Say the expert would be the Governor's expert on reclamation and protected civil service wise, how would that setup strike you?

MR. GWYNN. Well, let me ask you, how would this expert . . . what degree of authority would he be subjected to by the department he was under.

SENATOR MITCHELL. I assume it would be similar to the federal system as we have now in, say, the Interior Department or other departments, with political appointees at their helm. The experts and technicians are protected by civil service, but they may have to emphasize the different policies of the different administrations.

MR. GWYNN. I think it's important that we have this expert, whether he be insulated (politically) or not. Actually, I would prefer it as it's set up in Illinois, where there is a sort of cooperative agency setup with the various companies, who help support the agency. Reclamation is carried on in that area with no political implications whatsoever. When mining is completed in a given area to the point where reclamation can be undertaken, this agency, which is supported by all the mining companies-- I shouldn't call it an agency, it is an organization--examines the mined area and determines what the best reclamation plan will be. They also produce their own trees and vegetation and actually do the work, as supported by the various mining companies. They undertake it from the point of what should be done to actual completion of the work. I don't think we have enough mining in the area (Montana) to go that route. The point is that this organization is completely free of political manipulation.

In Indiana and Illinois today you will find that better than 85 percent of all lands have been reclaimed to a useful purpose. As you drive through, unless someone points them out you wouldn't know that mining had ever taken place, that is, unless you're an expert in the field and can recognize those areas yourself.

SENATOR MITCHELL. Well, then you are bringing in a third concept . . .

MR. GWYNN. I alluded to it to reflect on the independence of an insulated office.

SENATOR MITCHELL. Why was it you said this type of approach would not work in Montana.

MR. GWYNN. Well, I think you have to have enough of mining industry to support the organization. Remember they have their own nurseries, their own trucks, their own planting machines, seed collecting crews, and their own expertise. They do quite a job. Some of the companies may do reclamation on their own, but primarily the work is done by this organization.

SENATOR MITCHELL. This is something that really interests me. I didn't know that such a system was working anywhere. This might be a consideration for Montana. We have coal in eastern Montana and all these other minerals in the West. It might be a lot easier economically

and everything else if we started developing a nucleus for such an organization today, before we have more damage or before we set up this board, commission, etc., on a polarized basis.

MR. GWYNN. I think it's something that should be investigated, but I don't think it should affect the deliberations of this committee, because it would operate under the framework of whatever law we have. Perhaps in time the companies could get together and come up with this type of thing. But then it would be in the position of having to function under the type of law in effect in the state or respective states.

THE CHAIRMAN. At this time I would like to call on Mr. Ernest Thurlow from the Montana Railroad Association and Burlington-Northern, Inc.

ERNEST THURLOW. Mr. Chairman, Members of the Committee. I have just a few statements to make this morning, and I appreciate your putting me on the program at this time, as I have a rather tight schedule.

Mr. Chairman, I am Ernest Thurlow, manager of Mineral Development for Burlington-Northern, Inc. When I appeared before this committee last November, I had the same title, except that I represented the Northern Pacific Railway Company. The merger of the Northern lines with the Burlington resulted in the new company name. My previous statement, as well as this one, has been authorized by all of the railroads serving Montana, which include the Union Pacific Railroad Company and the Milwaukee Road.

Comments are presented in the order in which the list of recommendations was prepared by the executive secretary and includes comments on the additions, etc., in the executive secretary's memorandum of October 1, 1970.

As to Recommendations I, II, and III, we endorse them all in concept, including the deletion of paragraph 2 of Recommendation I. Of prime importance is the provision that would eliminate the necessity of excavation for the purpose of validating a discovery. We believe that this is extremely important in minimizing surface damage during exploration and will considerably enhance the image of the mineral industry. Time is of the essence in removing this requirement from the Montana mining statutes.

We are in agreement with new Recommendation E concerning dredge mining and believe that incorporating the dredge mining provisions in a single Surface-Mined Land Reclamation Act is a proper procedure.

Recommendation V is generally acceptable with due regard for the new Recommendation F. We appreciate the committee's dilemma in trying to arrive at the best method of administration of this act. We would suggest that a single administrator should make the decisions on all applications. He should be required to solicit opinions from all members of the Advisory Council with a time limitation for reply. We would also suggest that members of industry be invited to serve on the Advisory and Appeal Councils. This would, of course, give industry a voice in the decision-making process, and the industry position could be filled by a representative of the particular industry involved in the decision whether it be coal, uranium, bentonite, or some other mining venture.

We appreciate the opportunity of appearing again to make a statement on the important work of this committee and congratulate the committee on the type of hearings it is conducting and the evident progress that is being made toward the drafting of legislation on these matters.

QUESTIONS:

SENATOR MITCHELL. Mr. Thurlow, in your comments relative to gold dredge mining, may I assume that this is a matter of timing, that you would say work on it if it is found constitutional? Or do you think we ought to work on it now while it is being litigated in the courts?

MR. THURLOW. I would think that this is the way it should be handled . . . regardless of pending decisions in the courts. That is, if it's applicable . . . a very good way of handling that situation.

SENATOR MITCHELL. Yes, but my point is, do you think we should be doing this while it is in the courts, or do you think we ought to wait until the court makes a decision and then see what we are going to do?

MR. THURLOW. I would proceed in this direction regardless of what the court decides on the other legislation.

SENATOR MITCHELL. In spite of the court's jurisdiction?

MR. THURLOW. Yes.

REPRESENTATIVE ROMNEY. Mr. Thurlow, I like the administrative vehicle you envision, and not only by bringing in industry in an advisory capacity, but also I think it would be wise to broaden that field and bring in conservation organizations and farm organizations; in fact, anyone who might have something to contribute. Do you feel that way too?

MR. THURLOW. Yes, I do. Farming is an important consideration, and the administrator should call on the advice of experts in that field.

REPRESENTATIVE ROMNEY. In every conceivable field that would bear relationship to this situation.

MR. THURLOW. For any given reason . . . I think there may be a fairly limited number of fields, and each case must be handled upon its own merits.

REPRESENTATIVE ROMNEY. You mentioned various departments of government who might have relationship to it, then you brought in industry, and now you are agreeable to farming. What about other groups, such as Montana Wildlife Federation, the various other groups, such as the Montana Wildlife Association . . . the League of Women Voters.

MR. THURLOW. I would rather not get into politics on this, but I do feel that the administrator should feel free to call on any group that he feels has some pertinent advice to offer.

REPRESENTATIVE ROMNEY. That is what I am trying to get at. Everyone has a right to a view on this situation. It's all a matter of ownership by the people in the state of Montana and the industry.

REPRESENTATIVE JORDAN. Yesterday there were words to the effect that the owner of the coal should be required to pay a part of the reclamation on the coal. Has your industry given any consideration or thought to this concept?

MR. THURLOW. I would look at that as a development that should be initiated at the start, not something that should be introduced at this stage. I think that if the owner of the coal is going to be assessed for the reclamation costs, that he should include that in his lease price for the coal.

REPRESENTATIVE JORDAN. Then you would agree, sir, that we are fooling ourselves if we are eluding the fact that the cost is going to be borne by someone other than the consumer?

MR. THURLOW. Yes, I think so. If the operator is going to have to do the actual work, his costs are going to be passed on to the consumer.

REPRESENTATIVE JORDAN. I asked this question yesterday, but the answer has been deferred until you took the stand. What is the volume of acreage in the Colstrip area that would be owned by the railroad(?) at this time?

MR. THURLOW. That is, the acreage that has already been mined?

REPRESENTATIVE JORDAN. No, that is available for mining, or the acreage that has known coal reserves.

MR. THURLOW. I do not have the figure offhand. There are many sections of land, but I really don't have a figure . . . I'm sorry.

REPRESENTATIVE JORDAN. Thank you, sir.

REPRESENTATIVE ROMNEY. Is it within your knowledge . . . the quantity of coal which has been shipped by the Burlington-Northern and its predecessors from Montana to Cohasset and other points beyond the boundaries of Montana during the years 1969 and 1970?

MR. THURLOW. Yes, I have some approximate figures on that. I believe that last year it was somewhat under one million tons and this year it will be approximately three million tons.

REPRESENTATIVE ROMNEY. Pursuing this a little further, do you have an estimate on how much it might be in, say, the next 5 or 10 years?

MR. THURLOW. This is going to depend on a number of factors; how the markets develop, whether mining equipment is going to be available, whether railroad equipment is going to be available to move the amount of coal and supply these markets. Certainly the operators are looking into the opening of new mines and the possibility of shipping perhaps 10 to 20 million tons of coal per year within that 5- to 10-year period. I think that would be a safe estimate.

REPRESENTATIVE JORDAN. Mr. Chairman, I have one more question. Can you, for the benefit of this committee, indicate what acreage is involved in the production of 20 million tons of coal?

MR. THURLOW. This depends on the thickness of the coal seam. Many such seams in eastern Montana will average 20 to 25 feet (or more) in thickness, and coal will average about 1,760 tons per acre-foot--so you can take these figures and arrive at tonnage per acre. I was including in my shipping estimates some of the Wyoming mines.

REPRESENTATIVE JORDAN. That's what I wanted to ask you--whether or not you were talking about only Montana or all of the coal-producing area.

MR. THURLOW. I'm talking about the coal-producing area. There are places in Wyoming where coal beds may reach a hundred

feet in thickness, so it doesn't take many acres there to get a large tonnage.

REPRESENTATIVE ROMNEY. Those figures were for both Montana and Wyoming, not just for Montana?

MR. THURLOW. That is correct, but the figure for last year and this year are essentially for Montana. Our projection for 10 to 20 million tons would include Wyoming coal, also.

REPRESENTATIVE ROMNEY. With that projection, can you make any estimate of the division of the 20 million tons between Montana and Wyoming?

MR. THURLOW. I would think it would be close to fifty-fifty.

THE CHAIRMAN. Thank you, Mr. Thurlow, for the benefit of those here on the committee.

Yesterday we had discussion on the proposed Dredge Mining Act and the statute that sits in court today. I failed to make a comment on that, which I probably should do at this time, if it would serve to clear the air a little. We do not, of course, know what the Supreme Court decision will be, and I think the advice is good--that we do not take any positive steps until this is determined, but I believe also and will ask the committee when we meet in executive session. Let us proceed to draft amendments to incorporate in this bill (reclamation bill) which takes care of it, if the court decision were to reverse the present statute.

I think at this particular time that social pressures support the opportunity to enact new statutes in the fields that we have discussed in this hearing. Now, I do not think we should wait until the legislature starts to try to run another bill through or correct the flaws in the one that did go through. I believe that in the best interests of the people, over the long pull we can amend the law as we have talked about. I hope you people will go along with me on that.

I see now that Dr. Will Clark from the institution at Eastern Montana is here. Dr. Clark.

WILL CLARK. Thank you very much. I am speaking on behalf of the Montana Conservation Council, but I feel rather like a mosquito in a nudist colony--I don't know where to start. So many of the people that testify at a hearing like this are experts in mining, taxation, and one thing or another. I am primarily an interested citizen, a teacher of conservation, and a person who has been active in the Montana Conservation Council for a good number of years.

Our council was represented here during your last year's November 9 and 10 hearings. Mr. Dick Fabrick presented an excellent statement on behalf of the Montana Conservation Council, and I certainly commend it to your re-reading or to your first reading, if you have not done so, for it points up the attitude and philosophy of the council. Since that time, the necessity of considering broad environmental quality as a yardstick by which to judge land and resource uses and development has become even more firmly entrenched in the attitudes of the public.

We may have to recognize this. It is only the foolish or the blind that might still feel that if they control land they can do as they choose with it. The Conservation Council firmly restates its belief in the following several points:

1. Economic development is essential and necessary for the good of Montana.
2. Economic development can occur without adverse environmental effects if the desire is there, for the technology now exists in large measures to achieve development without degradation.
3. Fragmentation and polarization which exists between and among groups must be decreased by all parties showing a considerably higher degree of consideration, respect, and understanding of each other's viewpoints and refraining, as too often happens, from applying derogatory labels and making gross and usually silly generalizations.
4. Resources management of any nature must be based on the concept of one's having the stewardship rather than ownership of a resource.
5. It is for the long-range economic self interest of industries to become responsible citizens in relation to meeting obligations to the public and to the environment as a whole.
6. The public, in demanding of industry that it clean up, plan, develop carefully, reclaim, and otherwise maintain and enhance environmental quality, must itself be willing to absorb a reasonable cost of such endeavors.
7. History has very clearly indicated that except for a very few notable exceptions, developers, resource extractors, and most others making money from mineral extractions of various sorts seldom do more than they are required to do in preserving, maintaining, or recreating the quality of the environment. There are, of course, outstanding exceptions to that generalization.

The days of public belief in the highest platitudes of intent are over. The legislative group widely applied in all states must remove the sanctuary of competitive advantage afforded a polluter or a degrader in an area having lax regulations. Now, with these points in mind, I endeavored to do my homework by reviewing not only this committee's reports, but several other documents. I would like to call to your attention:

"Surface mining, problem or opportunity"--this is a policy statement by the Soil Conservation Society of America, and a very good one.

"Restoring surface-mined land"--a publication of the Department of Agriculture. This one gives a good statistical national overview of close to 600 different surface-mining sites, and their condition, quality, location, and all of these different sorts of things.

Some of the questions you were asking, Mr. Chairman, I think are quite pertinent. Let me just cite one that is applicable here. In the United States as a whole, out of a little more than 3 million acres of land whose surface has been disturbed by surface mining--this is all surface mining, not just coal--a full two-thirds of it, 2 million 40 thousand acres, need treatment, and only about a million do not need it. In Montana, of a total of 26,900 acres that have been disturbed, only 7,300 acres don't need any treatment, and 19,600 do. I think the latter study is pertinent.

Another document that I have studied and which I'm quite familiar with is the Proceedings of the Montana Coal Symposium, which took place just two days before your hearings last fall. Senator McGowan was down there (meeting was in Billings), and a great number of other people were down there. There is a lot of pertinent information in these proceedings of a highly technical and statistical nature.

Then getting to the committee report itself, then getting to the executive secretary's analyses of technical testimony (pages 54-58 of the Proceedings), there is in the analyses, I'm afraid, a certain amount of implied reservation of the validity of various testimony. Too frequently the nonstatistical or nontechnical testimony may be a value of opinion. In relation to Dr. Silverman . . . or this is an opinion that should not be considered in relation to Mr. Johnson of the Soil and Water Conservation Districts, or this statement is an opinion for which there is no evidence to support this contention in relation to Mr. Dunkle or just nontechnical in relation to the League Women Voters.

In contrast, there are comments of approbation on purely technical testimony. We are dealing, gentlemen, with matters of opinion, and we need to be careful not to be bedazzled by statistics, which only support a person's opinion. So do not, please, downgrade opinions expressed in these hearings.

As to the recommendations themselves, no. I certainly seems sound. In item 4, however, it seems it would be better to do more than merely discourage indiscriminate bulldozing. I'm not saying in any sense that bulldozing is not necessary under certain conditions, certain situations, etc., but certainly indiscriminate bulldozing has created a lot of problems; and again, in this restoring surface-mined land, there are some interesting statistics about the damage done in relation to this matter of bulldozing. Mining and haul roads are responsible for much erosion, especially in mountain areas. About 1,650 miles of these mining roads have eroded so badly that they need major repairs, and another 3,300 miles have been moderately eroded, and the problem there is that often these roads, and this has been mentioned by the Forest Service in a recent report too, have been just sort of casually torn into the countryside without any real consideration of location, drainage, slope, and several other things of this sort. So, I think it needs to be more than just a passing effort to discourage indiscriminate bulldozing.

Recommendations II and III seem to be very sound. In Recommendation IV I feel that it would make very good sense ultimately to bring all surface-mining regulations under one legislative roof. Of course, with due recognition given to the different sorts of problems encountered by each type of mining, a piecemeal solution is really not a sound one. Now, it may not be feasible at the immediate time to actually try to wrap up the whole job in the bill you gentlemen are working on. You are working on a very particular problem, but I think in the long run we have got to head in that direction. It might solve--this was discussed by the two previous persons testifying (Gwynn and Bernfeld)--this problem of the piecemeal aspects of some of the things we are doing.

Now in Recommendation V, in item 1 there is a statement that, and I quote "mined land be reclaimed to its highest practical use commensurate with the needs of the landowners and the conditions of the locality." Now, actually the matter goes well beyond the near needs of the landowner. Severe land destruction might really meet the economic need of the present owner, and the effects of severe land treatment often go far beyond just the locality. So a broader responsibility exists beyond just the landowner or the locality, and it should be clarified. In the latest revision that Dr. Groff gave me just as I came in the door this morning, I note that you have considered this already, or are going to. Here under new Recommendation F, item 5, no. 1, it was changed to "needs of the landowner to best interests of the state," and that is certainly the right direction.

On Recommendation V, no. 2, I think we have no particular comment and really reserve judgment, since it is not clear what appropriate parts . . . as it states in there of the 1969 law . . . should be included in amendments to the 1967 law, following repeal of the 1969 statutes.

It is difficult to comment intelligently on an open-ended recommendation such as Recommendation V, item 4, but I put this one in in relation to the comments which Dr. Groff passed out as representing the present thought. This has to do with the commissioner of Lands and Investments as administrator versus the idea of an expert that has been talked about. The one point that I'd like to make is that this expert, among his expertise, should very definitely have a sound grounding in ecology. I don't deny the fact that he has to be realistic about the site limitations, the difficulties of the operator in reclaiming land, and the practical considerations. But certainly he has to have a good ecological background or he is not going to make first base.

On Recommendation V, no. 5, the advisory council idea is certainly excellent in that it needs some much-needed checks and balances, if parts 6, 7, 8, and 9 are followed. Again, this morning I see there is this suggestion of cutting the council to three members, and it seems to me that this is too small, and then, of course, we heard a further proposal for industrial representatives and then this other idea you (Rep. Romney) brought up of other persons being involved. You really do open a can of worms when you open the door that wide, but I think that what we need to do is to find a structure for the advisory council that cannot be attacked as being too one-sided. I think that is the criteria. I'd agree that if you got 20 people, or something like that, on the council it would be totally unworkable, but I think three is too small. Somewhere in between is the representation that does give precedence to the broad base of the decisions and policy ideas of the council. I think that would be a fine idea.

In Recommendation V, item 8, subitem b, the reclamation plan certainly must be flexible and able to be changed, but a plan should be submitted and approved by the advisory council prior to starting mining. I think certainly that should be mandatory. I do not see the need for the loophole words, and I quote "the plan will, when practical, be submitted prior to mining." I don't understand when it wouldn't be practical to file a plan, and I think the only assurance . . . for the defense of the public and the only assurance that the industry has that it is going to present the proper image and do the job is to file a plan and state what they are going to do, fully recognizing that the plan might have to be revised, changed, etc. I think it was Mr. Gwynn this morning who mentioned that certainly these plans have to be flexible and they should not be imposed from above, that is, it has got to be a cooperative proposition.

Now, one further point, if the August 20, 1970, draft copy of the suggested contract form for surface-coal mining is one result of this committee's thoughts and efforts, then it seems we are moving in a sound and responsible direction.

Here in Montana we have the near-surface mineral resources, particularly coal. We have the economic development that is possible. The methods of transporting this energy by rail, pipeline, or wire is feasible. The technology of near-site conversion with minimal pollution is near in magnetohydrodynamics. The job is to set the stage and state the rules whereby industry and the state as a whole may benefit from the development and use of the resources.

Now, a further job mentioned by one of the committee members this morning is to set up the tax revenue arrangement so that, as too infrequently in the past, the state is a long-term major beneficiary of having this major energy resource in its border.

In conclusion, the Montana Conservation Council very highly commends this committee for the very evident sound progress it has made toward developing concepts and operational details for legislation which will build a feasible, reasonable, economically sound, and ecologically responsible framework in which we can, as we certainly must, utilize our near-the-surface mineral resources of many sorts and at the same time insure through reclamation the re-creation of an environment at least as productive and pleasant as the initial environment. Gentlemen, I thank you.

THE CHAIRMAN. Thank you, Dr. Clark. I would like to make one comment on your remarks and ask you one question. You shouldn't feel bad, because I also become confused in this area of experts and nonexperts in their testimony as to which is right and which is wrong. The question I would like to ask in regard to your suggestion that this plan be presented before operations, in your opinion, if a coal company stated that after their operation or drilling they would carry out the reclamation program as is recommended by the advisory board or the man in charge--now maybe I should clarify this one step further--it has been difficult for me to understand how anyone can submit a reclamation plan until they know what they have to work with. I just don't quite see how you can set down rules. This is the reason, in some area, there may be some good water after the mineral is removed, and this would cause a leaning toward recreation and wildlife; in another area the water may be saline and unfit for almost anything. Say they know there is water but they won't be sure of its quality after mining. This would relate to the plan they might submit. Or in another case, you may have 30 feet of overburden and in another, 100 feet. It seems to me it is most difficult for anyone to sit down and draft a plan, a reclamation plan, before they know the factors involved. Can you comment on that?

DR. CLARK. Yes, being a college professor I'm willing to comment on anything, sir. Actually, your point is well taken, but my concept of the plan that would be filed prior to mining would be based upon the best

judgment following the engineering survey. For instance, they know how much earth overburden they are going to have to move. They have got to figure where exactly they are going to put it. They have got to figure out the sequence in which they lay it down. They are going to have to figure out if they have to move it again. In other words, there is just a lot of plain dirt moving involved in this thing. Certainly if they hit unexpected good water then the plan should be revised. If they hit unexpected poor water, again maybe a revision. I think the plan has to be flexible, without a whole lot of redtape associated with it, but I still think that it would be essential. I think the public would feel a heck of a lot better about all of this, if before an operator dug into an area he did on the basis of his engineering survey state, "I will endeavor to do the following things in the light of the amount of dirt I'm going to move, the quality of soil, the nature of the rainfall, and the topography of this area." That is what I mean by a general plan before mining. I don't know whether that is an adequate answer.

THE CHAIRMAN. Would you feel that the expertise . . . did you state . . . something else for that?

DR. CLARK. I'm going to take the Fifth on that one--I'm no expert in the reclamation of land and don't pretend to be. I think that it could very well be a job that you could assign to a panel of, perhaps, three people; perhaps a mining person, an ecologist, and a plant-materials man, something like this. You might get three persons together and say "give us the general guideline that might serve as a basis for a company preparing some sort of a plan like this."

THE CHAIRMAN. Maybe you've helped us.

DR. CLARK. I hope so.

REPRESENTATIVE JORDAN. Dr. Clark, it occurs to me that in most of the discussions that we've heard since the first hearing we had with this committee, that it has been possibly following the idea that all mining in Montana is inherently bad for Montana from the standpoint of ecology. It appears we are saying to ourselves, or having said to us, that Mother Nature has never made a mistake. That whatever she has laid in Montana, as far as our land topography is concerned, is the best thing for Montana and disturbing the soil or making a change in the topography is not good for Montana.

It also occurs to me that what we are saying is in our reclamation we have to reclaim the land to the ideals of some specific group, rather than the people who are living in that specific area or the specific locale; that we are going to reclaim this land to meet specifications of a certain select group who have their own ideas of what Montana should look like.

Is thought being given, as far as the conservationist group of which I believe you are totally not related or connected Is opinion or thought being given to the opinions of the people in that particular locale where the mining is taking place, as to whether or not their ideas are being given valid consideration?

DR. CLARK. That is quite an order. Let me make several comments. I feel that those persons who feel that to disturb the surface of the land is a sacrilege to the land have their heads in a bucket. The same people who shout about "don't cut down the Redwoods" are the ones who want the Redwood furniture. In other words, we all are the beneficiaries of our own technological society and our very high level of productivity. I think that we must find ways in which to continue to extract the raw materials that we need with a minimal damage to the environment.

For instance, the Stillwater business--the exploration of The Anaconda Company up there is causing a great deal of stir. That stir, I think, is totally unnecessary if Anaconda had done this exploration using techniques that were nondestructive techniques. It isn't the exploration that is bothering the people, it is the way in which it is done. I don't think that thoughtful individuals realize that we are going to be able to afford to leave lots of coal under our soil, or lots of minerals, etc. We've got to use it in our industrial economy, and so I think we've got to go down the route of trying to find ways in which to do these things, extract these raw materials with either a minimal damage to the environment or a reclaiming of it.

Now I'll continue, if I may, on the second part of your question. I would be presumptuous if I gave the impression that I was speaking for all conservation groups in Montana, because, of course, there are all hues and complexions thereof. The Montana Conservation Council is a rather unique outfit in that it does have in its board and in its membership a wide range of other organizations represented. It serves as a meeting ground, a forum, a neutral ground, a catalyst. These kind of things you see, and it has been instrumental over the past years, with the aid of other organizations and a lot of political people, in achieving some very significant resource legislation in Montana.

One of the things we are faced with--I alluded to it in my testimony--is this business of making labels. We're apt to think that there are two camps. Those of the beady-eyed industrialists who are exploiting our resources, and on the other hand, we are apt to think there are the angelic halo-carrying preservationists. Well, of course this is far too simple a division, and you get all sorts of complexities in between.

I think that what a committee like this has to do is to tap the opinions of a lot of people--of a cross-section of people--and then make your best judgments on what is best for the state.

Now one last point. You mentioned our conservation group's concern about the reclamation opinion of people living in the locale. Let us say on a coal strip or something of that sort. Yes, I think, yes, in general, and certainly the Montana Conservation Council would be concerned with such opinions, if they were reasonably farsighted about it. It is often true, however, that the persons closest to a particular problem can't see the forest for the trees. They are not apt to see the long-range effects. No, that does not mean that one should ignore their wishes, but it also means that their wishes should not necessarily be the guideline for the solution. I think it has got to be a process of finding out what is best to do for the local people, and for the state, and for the total environment.

THE CHAIRMAN. Dr. Clark, I think you've brought your part across very well. What I was primarily concerned about was to establish the fact that reclamation was highly opinionated. I was wondering about how we would find a person to administer the program, someone who would not be affected by pressure groups, either political or nonpolitical.

As far as ecology and reclamation in Montana are concerned, there is a strong division between the eastern and western parts of Montana. A cattleman in eastern Montana might be difficult to convince that the best thing for him is high-rise hills with trees, etc., because he wouldn't get the desired grazing.

DR. CLARK. No, but at the same time I think that if these reclamation plans can be carried forward, the cattleman can benefit from having the coal under his land, also from the restoration of that land to essentially grazing land. So, I think the major criteria are: Can it be brought back at least as productive as it was before? I think this is really a reasonable objective.

THE CHAIRMAN. Thank you. In relation to your testimony, I would like to make one further comment. I, too, am a member of the Conservation Council, and I would like to tell the committee and the people here today of a serious undertaking they have embarked upon. In the last Montana Legislative session there were 99 bills introduced in the resource field. I think there is a probability that in the coming session there may be as many as 250 bills in this field. The council has made an attempt to review all 99 bills from last session to determine why they failed, if they were needed, and if needed, to attempt to put them in acceptable language so they might be passed and put into effective use. This is really quite an undertaking, and it has been enlightening for me to sit and work with them in a small way.

SENATOR MITCHELL. Thank you, Dr. Clark, for some excellent testimony. I would like to clarify several points. No. 1, you made reference to the model contract, and our Chairman also mentioned it. You suggested or said you liked its wording, if I understood you correctly.

DR. CLARK. Yes, that is right, Senator. It seemed to be going in the right direction. I am not a legal beagle at all, so I can't examine it from that standpoint. The philosophy, however, seemed very sound and fairly reasonable.

SENATOR MITCHELL. Yes, the beauty of it is it embodies the . . . getting into the regional approach. It was a product of the Natural Resources Committee. I think one of the jobs of this committee--this is a personal opinion--is to get coordinated with that council so that we aren't duplicating each other's efforts. I think they have done a very good job with this coal contract.

The question was brought up on the plan before mining. I think the contract we are talking about covers that in sec. 4, subsec. a, "At any time during the period of reclamation, the operator may for good reasons submit to the Bureau and the Advisory Committee a new reclamation plan or amendments to the existing plan." I think this was handled in some other paragraph on the same subject. This was written because the Bureau is currently in charge of the reclamation programs, and there is some discussion of giving that to another agency.

Talking about personal opinion, I think there has been some confusion. You brought it out very well in your testimony on the analyses of technical testimony. The memorandum that you referred to on going to a smaller advisory group is also in the same category, that is, not necessarily the committee's action or opinion. It may be, if we get around to working on it, but it is Sid's (executive secretary) approach to it, and I think even the press may have missed this a little bit yesterday.

DR. CLARK. This is input from Dr. Groff, then?

SENATOR MITCHELL. Right.

DR. CLARK. It was a very fine . . . motion.

SENATOR MITCHELL. Right, I agree. We have not had a chance yet to get into it.

DR. CLARK. I understood that was the committee's doctrine, but apparently not.

SENATOR MITCHELL. No.

THE CHAIRMAN. This supplement to our recommendations was completed by Dr. Groff at my request. He was ill, and we were not able to get the committee together for any consideration of it.

Somehow I am in complete agreement, and someone else testified here a moment ago that whatever the makeup of the board, we must provide a voice for the local people. I'm sure we must give industry an opportunity to be heard. I don't think any of us (the committee) yet knows just how we are going to do this. Hopefully, someone will come up with the answer we are after.

DR. GROFF. Will, I would like to ask you this question. Was your statement approved by the Conservation Council?

DR. CLARK. The statement in total was not. I was charged by the Conservation Council at its September 26 board meeting to be present here and to make a statement on behalf of the council. I do not wish to imply--and you'll notice I said "I" and not the council when I was talking about the recommendations--that the council has necessarily voted on my specific comments. I am trying to reflect the philosophy of the council and then make personal comments relative to, or on the basis of, that philosophy. But they are all opinions, Sid.

DR. GROFF. Well, that's quite all right, and I appreciate your constructive criticism on the executive secretary's analysis of technical testimony. However, I would like to point out that's precisely what the title is--an analysis of technical testimony. I was asked by the Chairman to analyze the technical portions of the testimony. Wherever I ran into a statement that was obviously an opinion that could be interpreted as fact, I so stated. One thing you said worries me--you pointed out the single word "nontechnical" related to Mrs. Eck's (Women's League of Voters) testimony. Now, I'm certainly not discriminating against the Women's League of Voters, but there was no technical testimony.

REPRESENTATIVE JORDAN. Boy, Linda is going to be right on your back (laughter).

DR. GROFF. I just wanted to make that point clear.

THE CHAIRMAN. By no means does this mean we will not hear from other people. Is there anyone else who is coming to make a statement today? I would like to see a show of hands of those who intend to make a statement. Raise your hand also if you know that someone else is coming. Okay. We will take a recess until 11:10 for coffee.

COFFEEBREAK

THE CHAIRMAN. Would you give the committee your name and who you represent, John.

JOHN HINAMAN. Thank you, Mr. Chairman, and Members of the Committee. My name is John Hinaman. I'm a commercial cow-calf rancher in the upper Stillwater Valley. I'm a committee member of the Beartooth Reclamation Association. I'm a local representative of the Sierra Club, but I'm here today as a private, concerned citizen. I believe I speak for both groups. I read with interest the Proceedings and Recommendations of the 1969 Conference. It is obvious that the committee has wrestled with the problems more than the great variety of interests that were heard. It is also obvious that the committee well realizes the tremendous responsibility that it is charged with in making its recommendations concerning mining and reclamation. My comments concern your recommendations proposed in Part 3 of your report. On one point my thunder was somewhat stolen by Dr. Clark, but I will go ahead and repeat it anyhow. In Recommendation V, paragraph 8a, 3d sentence, I feel it should be absolutely mandatory that the preliminary reclamation plan be approved before start of actual mining operations. If this is not an ironclad obligation, it is conceivable that an unscrupulous operator could avoid sending a plan and could delay reclamation work for a long period of time.

I believe a good mining operator would welcome this requirement. It was pointed out time and time again in this conference that economic competition will dictate which practices are followed . . . I repeat, I strongly urge we should strike the words "when practical" from the 3d sentence, paragraph 8b. It would then be "a preliminary reclamation plan will be submitted prior to start of mining operations."

My second point relates to Recommendation V, item 10. I believe the minimum bond should be considerably more than \$50 per acre. Little or no work can be done for this figure. I recognize that the committee does not wish to preclude the small operator; however, any operator that is considering mining must have sufficient backing to do reclamation work, even if the mine should not work out. It would be criminal for a large operator to forfeit a small bond, because that is less expensive and easier, rather than do the reclamation work agreed upon.

Thank you very much.

THE CHAIRMAN. Any questions from any member of the committee?

REPRESENTATIVE ROMNEY. Mr. Hinaman, do you feel there are other qualifying phrases, such as the one you objected to, that should be eliminated?

MR. HINAMAN. I looked very carefully, and that was the one that really bothered me. I don't recall any others right now.

THE CHAIRMAN. I admit I looked through the recommendations quite carefully, and this was the one qualification that certainly did bother me. I believe the answer to the question is, no.

REPRESENTATIVE JORDAN. In reference to striking the words "where practical" is concerned, are there any federal lands involved in your area that might be considered mineable?

MR. HINAMAN. There are lots of Forest Service lands, yes.

REPRESENTATIVE JORDAN. The reason I asked this question-- you should understand that we in Montana cannot legislate laws that are going to apply on federal lands. You very well may be on property that is state lands or private lands and observe mining operations on federal lands. Yet we cannot pass laws that would govern federal lands. That is why I think the word "practical" was in the recommendation.

MR. HINAMAN. That should be made clear that is the reason behind it and not a possible inconvenience to someone.

THE CHAIRMAN. John, I've one other comment related to either one of your remarks or somebody else's this morning. Due to the situation that exists today throughout the United States, pressures of other areas, organizations, populations, etc., we are hopeful that we might be able to provide something of a regional approach. I was thinking mainly in terms of North Dakota, South Dakota, Wyoming, and Montana. It seems to me that too many times, and too often, the states fail to meet and live up to their responsibility, then the federal government comes along and passes legislation that we adopt. They are not as far ahead on this reclamation as we are right now. I think if we could come up with a uniform approach and a plan for all our mining companies and our other four states, including Nebraska, would go along. We might then have a plan that would really work. Does this sound practical to you and your endeavor where you do have forest land that's being mined?

MR. HINAMAN. Yes, I see no reason why that is not practical. I just object to possible loopholes where the minority can go contrary to the public interests.

THE CHAIRMAN. Okay. Any other questions? Does anyone else have a short statement they would care to make, even though they have made one before?

SENATOR MITCHELL. Could we utilize this short slack period right here for Mr. Bernfeld to discuss this regional approach that you brought up. All of us here have been talking about it. I would like to see how he envisions it and from his vast experience what recommendations he could give this committee. I'm talking about the regional approach, Montana, North Dakota, South Dakota, Wyoming. Would you care to just converse on this?

THE CHAIRMAN. Mr. Bernfeld, would you care to come forward?

MR. BERNFELD. My only familiarity with the regional approach is with the draft contract that I saw this morning. Is that what you are inquiring about? I thought the draft as it was not set up was very reasonable and showed a real intent to accomplish a good objective, and I think the frame of the contract would work.

It required a preliminary plan to be submitted, which I think can be done in view of a fuzzy knowledge of what the environment is or will be and what will have to be done later. That may be corrected by the provision that at any time the operator can submit a new plan. I have one suggestion in that direction, though, that the same right be given to the state. In other words, if the state authorities thought the original plan should be altered because of public need, the state should have the same right the contractor is provided.

Generally, I think the contract is all right, except for one small thing--a matter of principle and that relates to the clause Mr. Jordan mentioned on archeology. I think it is commendable that the state should be sensitive to the destruction of archeological sites, artifacts, dinosaur deposits, etc. This is really a cultural concern of the state, and I think they should have someone really interested, like a state archeologist whose responsibility would be to oversee all excavation activities. Let him do that for the benefit of the state. If a company hires an archeologist, there will always be the charge, whether true or not, that the archeologist could be squelched by his employer. Right there you affect the acceptability of his work.

I can't think of any other comment, other than what I said at first--I thought it was a very fair and uncomplicated attempt to reach a good end.

SENATOR MITCHELL. Let me pick your mind a little bit for some free legal advice for the committee. On the regional approach, what would be our proper procedure and legal limitations as to what we could do as a confederation of states, if I may use that term in reference to federal law?

MR. BERNFELD. I think the Chairman pointed out a minute ago that if we all got together and had a common approach, it would have a very strong influence, say, on the Interior Department to go along and try to initiate legislation to effectuate something along that line. I think that legislation at this time could naturally apply only to state or private lands. It couldn't apply to federal lands, because the State of Montana would have no right to control operations on federal land. These would be conducted under federal law.

REPRESENTATIVE JORDAN. Mr. Bernfeld, in reference to this regional claim type thing--the proposed draft copy of the surface-coal mined-land reclamation contract--you aren't referring specifically to that at all, are you?

MR. BERNFELD. I am referring to that a little, I think. The contract shouldn't be limited to coal lands. I'm talking about strip-land operations. I'd forgotten that point. It was labeled as a coal contract. I believe the legislation should be an all-inclusive code for "Mined-Land Reclamation" of whatever nature, and not one aimed at the coal industry alone. Where individual industries require special provisions at variance with the general rules, these could be taken care of properly in special sections or subdivisions of the master act applicable to the particular industry.

REPRESENTATIVE JORDAN. Well then, the reason I'm asking this question--you have read the contract, the draft copy, I'm certain?

MR. BERNFELD. Yes, this morning.

REPRESENTATIVE JORDAN. Would you agree that there has to be some dressing of verbage used in various sections of that contract?

MR. BERNFELD. Yes, I think it would use a little bit of refinement and perhaps a little more specific requirements in certain directions so the state gets the compliance it wants.

REPRESENTATIVE JORDAN. Well, I'm speaking now, Mr. Bernfeld, particularly on sec. 2, article d, where it says "to accomplish practical utilization of soil material, such material will be removed and replaced on disturbed areas after completion or termination of that particular phase of mining operation, at a depth to support plant growth on slopes 2:1 or less." Now, I think you will agree with me after viewing the slides yesterday, that trying to stockpile the topsoil in the eastern Montana mining areas we are discussing is a totally impractical application.

MR. BERNFELD. I agree with you that with the depth of topsoil you have it would be dissipated in excavation along the way . . . you

couldn't stockpile it. It would be just a fraction of an inch, wouldn't it?

REPRESENTATIVE JORDAN. Right, and that is what I was referring to in the verbage of the contract.

MR. BERNFELD. Well, this was the polishing up I was talking about. I say the principle outline of this approach is good, but I think it needs polishing upon a few very practical points . . . and that's one of them.

REPRESENTATIVE JORDAN. Thank you.

SENATOR MITCHELL. Mr. Bernfeld, in reference to that one point we were discussing during the coffeebreak, it says practical utilization of soil material as opposed to topsoil because of the problem with topsoil. What they are talking about here is the leached, or basically leached, top material. It seems to me that we are just butting our heads against a brick wall, if we are going over to eastern Montana, where there is low rainfall and not much topsoil to start with, and turn it upside down and put all that sterile, or mineralized, salt, etc., material on top . . . and then go in and plant some vegetation.

What they are driving at here is that we take the soil material that at least theoretically should be capable of sustaining plant growth and stockpiling it. Then we don't run into problems they've got, or hopefully avoid as much as possible what they've got in North Dakota. There they have all this soil that is practically cement where they are trying to grow plants. This is what the contract is about.

MR. BERNFELD. Well, what I'd like to point out is the contract is not clear enough. In pointing this out, I can point to another thing, and if you'll think back a few years, whether within your own experience or along the lines of farmers and stockmen who have to know their areas, if you remember the mid-thirties, there was a terrific dust bowl that stretched over eastern Montana. You saw sand dunes march across the country, engulf ranches, houses, and everything else. At that time they blamed it on plowing the buffalo range, that the topsoil couldn't be preserved. Take a look, say, at what's done in strip mining. I don't see any practical way in which you can salvage that thin soil on top of the land in the course of the initial excavation. When you pour it (topsoil) into that pile, it's going to be blown away.

As a very practical matter, not as a professional ecologist but just as a Boy Scout who keeps his eyes open by observation or sitting around here, you know you can't hang onto it.

SENATOR MITCHELL. Okay, you're wanting more description on soil material versus topsoil per se.

MR. BERNFELD. Well, the common impression of topsoil usually is stuff in which you can grow garden vegetables or a cash crop. I don't think in common jargon that topsoil means that fraction of an inch on range land which makes it possible for buffalo and other grasses to grow. Now, for instance, we operate large coal mines in the Indiana-Illinois area. With the soil there we are able to do this. We can level it off and turn it into grazing for dairy herds, and a good profit is made out of the dairy business, but you can't do that here.

SENATOR MITCHELL. Unfortunately you don't have the contract in front of you, but it describes soil materials as "those horizons containing topsoils and soils leached free of soluble salts capable of sustaining plant growth and recognized as such by standard authorities" . . . On the front page . . . The reason I dwell on this is because it is one of the areas concerning Montana. We don't have a lot of topsoil or soil materials in eastern Montana, and that's where all the coal is.

MR. BERNFELD. That's right, but you take a look at what happens in the natural state around this country. When you are in the plateau or plains area, especially down in Wyoming, you have huge alkaline lakes-- nothing can be done with the land. At least man hasn't solved the problem as what to do with it, and apparently from the testimony of the witnesses here, the plowing up of the land will encourage that condition. Apparently the sodium salts come to the fore, and this is one of the big problems in vegetating. It will have to depend on the actual condition that you intend to work from in making the restoration.

We have a lot of study to do, and you can't tell me right, or rather I don't think you can practically say that the miner or anybody else, in advance, can say what must be done to reclaim because you don't know whether or not it will work.

Now, some states have made a provision that says that after you try to re-seed twice your obligation is over with. In other words, you are not required to butt your head against a stone wall. Now, which is better? To take a tentative plan in the beginning and let your conditions and your knowledge control what is required afterwards, or are you going to let this useless provision stand? It constitutes a waste of money by the operator with no conceivable benefit to the public or the state.

REPRESENTATIVE ROMNEY. One moment, please. I would like to know what your view is about desecration of the soil by bulldozing and similar practices, whether in the Federal Constitution that is reserved

for the federal government, and if not, if those things that are not reserved are delegated to the states.

MR. BERNFELD. I'll be back in about two years with an encyclopedia (laughter in background).

Actually, though, notwithstanding a lot of mixture due, I think, to our technological industrial progress over the years, I think there is still a clear area in which the state alone can legislate. In the last 40 or 50 years because of interstate commerce and the fact that the effects of an act cannot be confined to a single state, the federal government and its legislation, regulations, etc., has not left a lot open in many operations to the states.

In connection with this strip-mine reclamation business, though, I think it would need some legislation on the federal level to compel the sort of thing you are talking about now, even though a start has already been made in that direction. Again it would be very good if a group of western states would get together and try to enact common legislation. It would have the effect, I think, you intend and actually exercise a very strong influence on the national legislation as to what should be done. Keeping this in mind, that what you do out here might not fit back East, so you would have to take that into account too. Again, because of soil differences for one thing, there (in the East) you can reclaim much more effectively in a lot of places than you could possibly do here in the light of present knowledge.

REPRESENTATIVE ROMNEY. Are there any Supreme Court decisions on that?

THE CHAIRMAN. Representative Romney, I have made a commitment to a lady who wishes to make her statement between 11:30 and 12 because she has to get back to work.

Mr. Bernfeld, if the committee so desires, we'll ask you to come back later.

MR. BERNFELD. Thank you.

THE CHAIRMAN. I believe Mrs. Cole is here on behalf of the Montana Division of the American Association of University Women. Would you come forward, please. Would you state your name, please, and the organization you represent.

MRS. MARION COLE. Thank you for hearing me at this time. I am Mrs. Marion Cole. I'm the vice president for the Montana branch of the AAUW. I represent the 15 branches of the association, and I wish

to present the following resolution, as adopted at the 21st Biennial Convention of the Montana Division of the American Association of University Women in Missoula, Montana, May 7-9, 1970;

Strip Mining and the Reclamation of Land

WHEREAS, coal has again become important as a source of energy, and by 1980, coal burned for power in North America is expected to approach 600 million tons per year, and

WHEREAS, it has been estimated that there are from 14 to 22 billion tons of strippable coal in Montana, of which 90 percent is in eastern Montana, and

WHEREAS, hundreds of thousands of acres* of agricultural, hunting, and recreational land in Montana will be stripped for coal in the near future, with one such operation now in effect; that is, Peabody Coal Company, the world's largest coal producer, has begun shipping its coal from its mine at Colstrip in a 100-car unit train carrying 10,000 tons of coal per week to the Minnesota Power & Light Company at Cohasset, Minnesota, an operation expected to last 20 years, and

WHEREAS, a second such operation announced on March 4, 1970, that Western Energy Company of Montana, subsidiary of the Montana Power Company, will sell one-half million tons of low-sulfur Colstrip coal annually to the Commonwealth Edison Company in Chicago for use in generating electricity, and

WHEREAS, the existing 1967 and 1969 laws are not strong enough to provide adequate land protection, particularly as they relate to strip mining of coal, that is, 1967 S.B. 69 has no standards of reclamation and is completely voluntary, and 1969 S.B. 164 provides for seeding of stripped lands, but says nothing about resulting vegetation,

THEREFORE, BE IT RESOLVED, that the Montana Division of AAUW strive for legislation that would make reclamation laws mandatory for all companies, and

BE IT FURTHER RESOLVED, that candidates for legislative offices, regardless of political affiliation, be polled as to their stand on reclamation laws, and their views be made known to their respective constituents.

*Executive Secretary's note: The expression "hundreds of thousands of acres" may be an overstatement. Present estimates are on the order of 126,000 acres total in 50 years; and in 50 years coal-strip mining may well be ended.

THE CHAIRMAN. Thank you, Mrs. Cole. Are there any questions?

REPRESENTATIVE JORDAN. Mr. Chairman, I have no questions for Mrs. Cole, but I would like to thank her for coming over. I know the AAUW has taken an active stand concerning our commission of mined lands in Montana. I think they are to be commended for it.

MRS. COLE. Thank you. I might mention specifically that all our branches are informed of what is transpiring in eastern Montana currently by the Glendive branch.

THE CHAIRMAN. Thank you again for your statement, Mrs. Cole. In one passing comment, I would like to add this. In our Democratic society, the process of legislation is often too slow to suit us, and we become upset and disturbed.

For your further information, I would like to mention to you that the 1965 session saw the introduction of the first coal strip-mining bill. This is something that caught fire very quickly, for at the time (1965) no one was interested--nobody wanted anything to do with it. I believe in the last session (1969) there were some six bills on strip-mining reclamation. So, while this is a slow process, I'm sure I don't know of any other area where things have jumped and ran so rapidly.

I hope we will be able to come up with something to help meet your criticism.

There is one question I would like to ask Mr. Posewitz. He told me yesterday he would answer questions, and I have missed his valuable judgment and wisdom. This is a simple question and one that can be answered very easily. In your department, do you have anybody at this present time who in your opinion is a mining engineer or a mining geologist, or anybody who can fit in that particular category?

MR. POSEWITZ. No, sir, Senator McGowan. We don't have anyone with expertise, specifically with mining geology or engineering. We do have some individuals who have training in both geology and wildlife management. We would visualize our major contribution in the area of reclamation to be one of helping in the design of areas that will be dedicated to reclamation for the purpose of fish and wildlife management. We feel we are well qualified here. There seems to be a strong tendency to dedicate these areas as fish and wildlife management areas. We feel that when this is done that we definitely should have a significant part of the planning.

THE CHAIRMAN. Thank you. Does anyone wish to ask any further questions? If not, gentlemen, I believe there is no one else here who wishes to make a statement. Yes, Vic, come forward.

REPRESENTATIVE VIC EAST. Thank you, Mr. Chairman. I'm Representative East, District 6. Relative to the memorandum, which I went over this morning, I noticed a suggested change on page 2, Recommendation V, sec. 1. It says "change needs of the landowners to best interests of the state." I would like the record to show that I protest this. I think that one of the reasons that we are here is to protect the needs of the landowners. I would suggest that . . . I wouldn't necessarily object to retaining this and changing the recommendation to "needs of the landowners and best interests of the state."

I certainly think that it would be a mistake to strike the needs of the landowners, because as I said before, that's one of the reasons we are here.

THE CHAIRMAN. Thank you very much, Vic. I believe we are at the point of bringing our hearing to a close. I would like to take this opportunity to thank each and every one of you for your counsel, your wisdom, and your suggestions.

I would also like to ask you, that in trying to arrive at some solutions for these almost incomprehensible problems, we need your help and your prayers. We also need help in the next session of the legislature, if we are to pass this type of legislation. I believe probably that what we will do will not make everybody exactly happy. But I am hopeful that we can do some things that will make everybody partly happy. On that basis and approach, I think, is the only way good legislation can come.

Thank you all again very kindly. You have been a delightful group. We now stand adjourned.

APPENDIX 1

DATE: October 1, 1970

M E M O R A N D U M

TO: Senator Gordon McGowan, Chairman, Governor's Conference on Mined-Land Reclamation and Mining Law: Conference Committee Members; and interested participants of the 1970 hearings

FROM: S. L. Groff, Conference Executive Secretary

RE: Additions, deletions, modifications, and options to the Committee Recommendations

The situation with respect to changes in mining law, etc., is in a state of flux. The following recommendations are based on various conversations with federal agencies, attorneys, opinions of industrial people, and a random sampling of observations of Montana citizens.

New Recommendation A

Go beyond the present permissive limits of the federal law and provide by state statute that a claim or group of claims may be temporarily located and held (for a period of two years) on the basis of geological, geochemical, or geophysical evidence of a promising mineral deposit.

Note: Such a provision would allow the use of the most modern techniques of exploration in delineating mineral anomalies. In this two-year period, sufficient core drilling can be accomplished to determine whether claims are worth locating and patenting under the present law. A special filing form might be designed for use in filing at the county courthouse, but maps, anomaly data, and descriptions prepared by a qualified expert might be held by the Montana Bureau of Mines and Geology in tight-file status. Such material would be regarded as supporting the filing and would be interpreted by Bureau experts if the validity of the filing were questioned.

New Recommendation B

Delete part (2) Recommendation I, page 59.

New Recommendation C

Part (4) Recommendation I, page 59, relative to bulldozing, the first option is preferable. The Montana Bureau of Mines and Geology seeks no administrative or police powers and prefers to be in the position of providing an unbiased opinion when so requested.

New Recommendation D

Recommendation III, page 60, should be changed to: "To amend the Montana mining law to provide that failure to file an annual-assessment-work affidavit within six months after the close of the assessment year is prima facie evidence of intent to abandon."

New Recommendation E

Recommendation IV, page 60. This recommendation changed. The Dredge Mining and Land Preservation Act should be simplified and incorporated into the Surface-Mined Land Reclamation Act.

Note: Dredge mining can be regarded as a surface-mining operation for sand and gravel. The fact that nonconsumptive water use and siltation are involved does not change this overall view, and it is not logical to have two separate laws dealing with the same matter. There may be disagreement on this recommendation, but there seems to be no legal deterrent to incorporating the essential provisions of the Dredge Mining Act into the Surface-Mined Land Reclamation Act.

New Recommendation F

All parts of this recommendation relate to Recommendation V, pages 60-61. Modifications and suggestions are here designated by the section numbers of Recommendation V.

(1) Change "needs of the landowners" to "best interests of the State".

(3) Note here that the 10,000-cubic-yard figure cannot be standardized for all the commodities mentioned; this matter is still unresolved. It is hoped that suggestions will be forthcoming from industry during or soon after this Conference. Also, the word "gravel" in the second line should be changed to "sand and gravel".

(4) An option is suggested. A qualified expert should be established as the Administrator and employed on a contract basis so as to be free of partisan political pressure. This might be accomplished by authorizing the Land Board to employ such an expert on contract basis and to establish his office in conjunction with, but not subordinate to, the department of the Commissioner of State Lands. Another means of accomplishing the same end might be to authorize Montana State University at Bozeman to establish and fill a position for Mined-Land Reclamation. The professor could then be borrowed by the administration to serve as administrator of the law.

This option may be objectionable, but it is pointed out that such a position should not be appointive, it should be free of partisan political pressure, and it must insure continuity of reasonable policies.

(5) Perhaps the Advisory, Review, and Appeal Council is too large. As an alternative, it is suggested that if a qualified expert were established as the Administrator, a Council membership of three would be sufficient. Based on size and function, the members could be the Commissioner of State Lands, the Director of the Planning and Economic Development Department, and the State Forester.

All member agencies of the Governor's Council on Natural Resources, however, would be designated advisors, including the Montana Bureau of Mines and Geology. In addition, the Montana Agricultural Experiment Station, the Bureau of Land Management, the U. S. Forest Service, and the U. S. Geological Survey would be designated as advisors.

(8) Part b may be modified by suggestions from the federal agencies and representatives from industry.

APPENDIX 2

Notes on the Executive Session of October 6, 1970

The October 5-6 hearing was adjourned before noon on October 6.

The committee met with all members present. Messrs. Kuglin, Hutchinson, and Holmes were present as an audience representing the press.

The executive secretary asked for instructions as to how to set up the Advisory, Review, and Appeals Council. After some discussion the Chairman stated that all committee members should send their ideas on this matter to the executive secretary.

The executive secretary then informed the committee that he was not an attorney and would need legal advice and assistance. He then asked for authority to seek such help on a free advisory basis. This was discussed and the Chairman then stated that the executive secretary was to obtain these legal advisory services wherever it was possible to do so.

Relative to transcribing the record of the hearing, the executive secretary was authorized to hire such assistance as needed. *

The Chairman noted that several statements, including one from the Fish and Game Department, would be forthcoming and that these should be distributed to the committee.

Senator Mitchell stated that the members' comments to the executive secretary should be delayed until these statements were available for study.

The date of the next meeting was set for November 28, 1970. **

The executive secretary then stated that it would be difficult to complete all the necessary work by this date, but he would do everything possible to do so.

*Executive secretary's note: This proved unnecessary as a transcriber hired for two weeks was paid out of another fund.

**This was later changed to November 30, 1970.

APPENDIX 3

DATE: November 28, 1970

MEMORANDUM

TO: Senator Gordon McGowan, Chairman, Governor's Conference on Mined-Land Reclamation and Mining Law; and Conference Committee Members

FROM: S. L. Groff, Conference Executive Secretary

RE: Semifinal recommendations related to Montana mining law

Reference is made to pages 59-61 of the 1969 Proceedings of this conference, and to the executive secretary's October 1 memorandum.

These recommendations are all that will be considered for drafting into proper form of resolutions and bills for the legislature.

Recommendation I

It is recommended that a joint resolution of the 1971 Legislature be prepared along the following lines and directed to the United States Congress: (Wording of whereas, etc., will be worked out in detail later.)

The Congress is requested to enact a federal statute to permit a temporary filing designed to hold a lode claim, group of claims, or area of reasonable size for the period of two years, during which mineral exploration may be conducted thereon. The type of permit is an exploration permit, and its specific purpose is to allow exploration for lode minerals in commercial deposits by modern exploration methods to include geology, geophysics, and geochemistry. A discovery may be proved by drill coring or other acceptable method, and the claims or area validated, protected, and brought into production under the provisions of the current mining laws as modified by various states. If, however, the claims or area prove noncommercial and are abandoned, any disturbance of the land shall be corrected or reclaimed in accordance with the regulations of the controlling federal agency.

Recommendation II

(This may be a joint resolution or a statute depending on the decision of the committee. If, however, it is decided to go the statute route, then enforcement and penalties on other than public domain must be considered.)

It is the intent and desire of the legislature that use of the bulldozer and other heavy land-moving or excavating equipment be restricted to

reasonable application in the exploration for minerals, or in the building of access or entry roads to mineral claims or properties. In all cases, the permission of the landowner is deemed necessary prior to excavation and land disturbance and for entry of such heavy equipment upon the landowner's property. (Note: Should be written to apply to timbering operations as well.)

Recommendation III

(These are all amendments to present sections of the statutes.)

A. Eliminate the requirement to excavate or move a stated volume of earth or rock to expose a deposit of valuable minerals

(Note: This would most likely be based on the Nevada law, which omits from its provisions the necessity of moving earth, but requires \$100 worth of work per claim. Also, the Nevada law allows the cumulative work for up to ten contiguous claims to be done on one claim. In other words, a \$1,000 worth of work on one claim will satisfy the discovery requirements of the claim on which the work is done, plus nine contiguous claims. The environmental advantage here should be obvious to the committee.)

B. Re-define "labor" in relation to annual assessment work as stated in Recommendation II, p. 59, of the 1969 Proceedings, or in the new Idaho statute (Sec. 47-613) Appendix, Item 6. (Please note: Part 3, line 38, "the basic findings therefrom". The State of Idaho has had problems with this, and it is believed best that Montana's version should not include it.)

C. Amend the Montana mining law (New Recommendation D, Memo of October 1) to read essentially as follows:

"Failure to file an annual affidavit of assessment work within 60 days after the close of the assessment year is prima facie evidence of intent not to file and to abandon the claim."

D. New section in the mining law. This is to establish the Montana Water Resources Board as the authority to regulate the plugging and/or sealing and/or putting to beneficial use the water from the deeper drill holes drilled in those localities where the ground-water resource may be contaminated or wasted. It is assumed that the Water Resources Board can prepare (with the assistance of the Bureau of Mines and Geology and the Oil and Gas Conservation Commission) and publicize reasonable rules and regulations. I don't think we're looking for a hard and secure system of control here, but a sort of permissive system where the operators have guidelines, and inspection is random by the three agencies previously mentioned.

Recommendation IV

This relates to a statute which will require a sort of location intent notice and completion location notice relative to the drilling of seismograph holes. It must be understood that seismograph holes are a different breed of cats and are not related to actual oil and gas drill holes or mineral exploration holes. They are drilled by professional crews who specialize in this type of work.

The Oil and Gas Commission does not have effective control in this area, but if the operator was compelled to notify the commission (1) of the general locality where they would be drilling and shooting, and (2) of the specific location of holes on a map drawn to such scale that the holes could actually be located after completion, then the commission would know where the holes are and who is responsible.

I understand that seismographers are required to post a bond, and it might be a good idea to incorporate in the statute that this bond will have to hold for a certain period, say, 18 months after completion of the work. This allows a period of time for violations to show up, or perhaps to be caught by random inspection of field personnel of the Oil and Gas Commission, the Bureau of Mines and Geology, and the Water Resources Board.

Beyond the 18-month period of liability, it might be well to put into the statute "or as determined by the courts in any specific case."

APPENDIX 4

Date: December 3, 1970

TO: Chairman and members, Governor's Conference on Mined-Land Reclamation and Montana Mining Law

FROM: S. L. Groff, Conference Executive Secretary

RE: Summary of minutes of the November 30 meeting

The committee met with the subcommittee of the Natural Resources Council in session with representatives of industry. Senators McGowan, Rugg, and Mitchell and Representative Jordan were present and did participate in the discussions of the subcommittee.

The meeting of the conference committee was called to order at approximately 1:40 p.m. The previously named members were present. Representative Romney had been excused because of work commitments.

Chairman McGowan queried the audience relative to checking the minutes of the October 5 and 6 conference. It was decided to proceed with the recommendations submitted to the conference committee by the executive secretary.

A copy of these recommendations is attached, and action was taken as follows:

Recommendation I

No action deferred for study. Executive secretary recommended dropping from consideration due to lack of understanding and the fact that Congress must act on the recommendations of the Public Land Law Review Commission in due course of time.

Recommendation II

Approved. Moved by Mitchell, seconded by Rugg. Approval is on basis that a bill with enforcement and penalty clause will be drafted and submitted to the committee.

Additional note: The Forest Service has advised that a copy of the Notice of Location would be helpful to them. A copy of such notice could be forwarded to the appropriate office by the county clerk or the miner himself. This could be placed either in this section or perhaps more properly in that portion of the law dealing with Notice of Location.

Also, Senator Mackay has asked for some provisions on cleaning up after exploration activities have been completed. This will be written into this section. The basic inspection, policing, and penalties, however, would seem to be a function of the landowner rather than the state, this being especially true of the U. S. Forest Service.

Recommendation III

Part A:

Approved to prepare amendment based on Nevada law. Moved by Rugg, seconded by Mitchell. Amendment to be submitted to committee for final approval.

Part B:

Approved to prepare amendment similar to the Idaho law, but it may be that direct reference to the federal statute involved would be simpler. Moved by Jordan, seconded by Mitchell. Amendment to be submitted to committee for final approval.

Part C:

Approved to prepare amendment as stated. Moved by Rugg, seconded by Jordan. Amendment to be submitted to committee for final approval.

Part D:

Approved on basis that new section or amendment has a penalty clause. Moved by Jordan, seconded by Rugg. Mitchell's motion to strike the last sentence was not seconded, but the intent of the committee is clear in that a penalty clause is wanted. New section or amendment to be submitted to committee for approval. Water Resources Board will assist.

Recommendation IV

Committee agreed they wanted something done on this and authorized the executive secretary to work with the Oil and Gas Commission for the purpose of preparing legislation to correct this situation. Mr. Norman Beaudry, executive secretary of the Montana Oil and Gas Commission, was present and testified as to their lack of control in this area.

Note: The executive secretary has subsequently contacted Mr. Beaudry and Mr. Hadley of the commission; also, the Water Resources has offered assistance. Jurisdiction on seismograph holes should be with the Oil and Gas Commission, but in Part D above, it would lie with the Water Resources Board. The bulk of the problems, however, will be on the public lands. In working this up the agencies involved should contact the Bureau of Land Management and/or the Forest Service for their desires and standards if they have them. One fact worth citing here is that it is impossible to inspect every seismograph hole. Thus, a random inspection system is the only one feasible. Also, the important thing seems to relate to a knowledge of who is responsible and where are the shot holes located.

Further committee action

1. The Chairman asked for a vote on making the director of the Water Resources Board the administrator of the Mined-Land Reclamation Act. This was approved; moved by Mitchell, and seconded by Rugg.

2. The Chairman asked for a motion relative to the employment of a mined-land reclamation expert. There was some discussion relative to who should be the employer, and this was related to the University System and the Montana Bureau of Mines and Geology, which would make his services available to the administrator.

The executive secretary noted that the legislature would have to provide funds for his employment.

Representative Jordan moved the Bureau of Mines and Geology be authorized to hire such an expert. Rugg seconded, Mitchell voted no, and asked that the minutes show his vote. The motion was approved.

3. Apparently not clarified by the Chairman was his desire that the Water Board (the Board itself) should become the review and/or appeal board, or committee for the Act. This will be included in a revised rough draft, which will be prepared by the executive secretary and set up in bill form by the Water Board.

4. The membership of an advisory committee or council was not decided. It is, however, again pointed out that the language of the Act can give the administrator both authority and direction to seek official advice from any person, state agency, or federal agency. In effect, this obviates the actual necessity of setting up an official advisory committee or council. In any event, the administrator can accept or reject advice and should be empowered to use his best judgment.

APPENDIX 5

SUPERIOR MINING COMPANY

A SUBSIDIARY OF THE SUPERIOR OIL COMPANY

SUITE 904, PAULSEN BUILDING

P. O. BOX 385

SPOKANE, WASHINGTON 99210

September 28, 1970

Dr. S. L. Groff
Executive Secretary
Governor's Conference
Montana College of Mineral
Science and Technology
Butte, Montana 59701

Dear Dr. Groff:

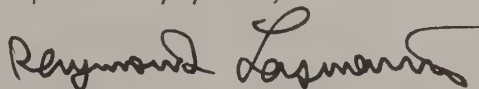
Please pass on to State Senator Gordon McGowan my personal thanks for the logical and thorough manner in which the State of Montana, through the Governor's Conference Committee on Mined-Land Reclamation and Montana Mining Law, is approaching the environmental problem.

I attended your first public conference on November 9 and 10, 1969 and was pleased to receive an invitation to participate in the forthcoming conference scheduled for October 5 and 6, 1970. Unfortunately, due to prior commitments, I will not be able to attend.

However, as I feel the environmental and legal problems faced by industry as well as the public are in need of improvement and revision, I want to submit a written statement concerning the "Recommendations prepared by the Executive Committee" on pages 59 through 61 of the Conference publication. I might add that I speak from experience after being in charge of mineral exploration programs in the Northwest, Southwest and Midwest United States. I have also conducted exploration activities in Canada, particularly in the Northwest Territories.

My statement is enclosed.

Respectfully yours,



Raymond Lasmanis
Senior Geologist

RL:ca

Enclosure

Statement of Raymond Lasmanis
Northwest U.S. District Geologist
Superior Mining Company
a wholly-owned subsidiary
of The Superior Oil Company

To Be Submitted to S.L. Groff
Executive Secretary
Governor's Conference Committee
on Mined-Land Reclamation
and Montana Mining Law
for October 5 and 6, 1970

As a practicing mineral-exploration geologist in the Northwest United States, including the State of Montana, I have the following statements to make concerning your Recommendations as outlined on pages 59 through 61 in the June 1970 publication of the last Conference.

RECOMMENDATION I

- (1) The Montana mining law should be amended so that the requirement for pit digging for location or discovery work be eliminated. This work is generally unsightly and in many cases needlessly disturbs the surface of the land. Most mineral exploration is now aimed at buried ore bodies which would be in no manner exposed by digging pits.
- (2) I would agree with your interpretation that the state lacks authority to require an assay for a valid discovery. Such a requirement would make the interpretation of the "prudent-man concept" even more difficult than at present.
- (3) a. It would indeed be unusual to be able to expose a discovery when searching for hidden deposits. Although allowing for pit work to protect the simple weekend prospector, I would recommend

drilling as a means for making a location discovery. The law could be patterned after Arizona where within 120 days one drill hole can validate up to 10 claims. In this manner a minimum of surface damage will result and the intent of the law satisfied.

- b. You state that minimum requirements to protect the ground water will be set forth relating to deep exploration holes. It is my recommendation that the amendment be clearly written and not deal with generalities. This way, in mineral exploration, one would know when a drill holes falls under the jurisdiction of this proposed amendment.

- (4) I agree with the philosophy that indiscriminate bulldozing should be discouraged. However, I strongly protest that the permission of the Montana Bureau of Mines and Geology be needed to use a bulldozer in mineral exploration. Bulldozers are now used only because the law requires pit digging or when there is a genuine need for road building, drill-site preparation, geological investigation, etc. Permission needed to use a bulldozer would be discriminatory against the mining industry as we are only a small user compared to others who employ bulldozers.

RECOMMENDATION II

I fully concur with Recommendation II as outlined on pages 59 and 60.

RECOMMENDATION III

I also support the intent of Recommendation III. However, I suggest that 30 days be required after close of the assessment year for recording of annual-assessment-work affidavit. After the work is completed, there

is no reason why it can't be recorded within 30 days. Allowing claims to lay in limbo for 6 months while waiting to see if an affidavit is to be recorded will only delay others from working on claims which have been abandoned due to lack of work.

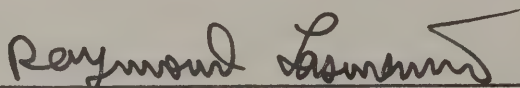
RECOMMENDATION IV

I support the views of the Committee as outlined on page 60 relating to Recommendation IV. The Dredge-Mining Statute should be amended where it becomes a workable law both from the viewpoint of the operator as well as protecting public interest.

RECOMMENDATION V

Since my experience is limited to mineral exploration only, I will not comment on Recommendation V. It would be better to listen to the views of those who are engaged in open-pit mining with the State of Montana and elsewhere.

Respectfully submitted by:



Raymond Lasmanis

RL:ca

APPENDIX 6

STATEMENT TO

The Governor's Conference on Mine-Land
Reclamation and Montana Mining Law

By

The Montana Fish and Game Commission
October 15, 1970

The Montana Fish and Game Commission has reviewed the recommendations contained in "Proceedings and Recommendations of the 1969 Governor's Conference on Mined-Land Reclamation and Montana Mining Law" and the "New Recommendations" passed out at the public hearing called to receive testimony on the original recommendations. The Fish and Game Commission offers the following comments on those recommendations and the topics they are relative to.

There is definitely a need for a reclamation oriented administrator to oversee reclamation of strip-mined land and a need for a strong advisory board to assist him with the authority to either approve or disapprove of reclamation plans. The advisory board as suggested in the "Proceedings" appears to be adequate; the advisory board and administrative arrangement suggested in the "New Recommendation Memorandum" in our opinion is inadequate. Under any arrangement the Fish and Game Commission should be granted a responsible position in administering reclamation contracts since it is evident from testimony given that fish and wildlife are frequently the objective of reclamation. The Fish and Game Commission works continuously with the game species in these areas and the habitat that produces them. As a result, we have the experience and staff to meaningfully participate in proposed reclamation dedicated to habitat restoration for fish and wildlife.

As a member of the Governor's Council on Natural Resources and Development, the Fish and Game Commission assisted in the development of a standard reclamation contract to be used under the contract method of reclamation. If this contract method is to be preserved the contract designed by the multi-interest Natural Resources Council should be adopted. Close cooperation between this Conference Committee and the Governor's Council is needed to obtain the objectives of both groups and should be instituted.

Progress is being made, at least in the changing attitudes toward reclamation and the laws that require reclamation at least be attempted. The next logical step will be to actually accomplish some land reclamation. Recognizing that some research has been directed toward making plants grow on spoils left by surface mining, little is known about reconstructing optimum environments. This, of course, does not apply to only fish and game, but to all aspects of life in the affected regions. To achieve total reclamation considerable research is still needed. To accomplish this a research fund should be established from which all competent and concerned groups could draw. In the competition for research grants the administrator of reclamation and his advisory board would decide on the relevance of the proposed research and the ability of the applicant to obtain federal matching funds to further increase the total effort. The problem of total reclamation is a difficult one and the need for more information is obvious.

Another concern is the use of bulldozers and road construction in the area of mineral exploration. The committee recommended under Recommendation 1, paragraph 4, "Express the sense of the legislature that indiscriminate bulldozing be discouraged or state that bulldozing will be used in mineral exploration and location work only at the discretion and the written permission of the Montana Bureau of Mines and Geology."

We are definitely in agreement with the basic objective of the committee, to bring under control indiscriminate bulldozing and road developing in the public forest. For many years the Commission has worked with the Forest Service trying to accomplish a road development program with the logging industry that would not be disruptive of wildlife ecology and that would not result in stream damage or unnecessary land damage. Progress is being made in this particular area. This accomplishment, however, will be to no avail if another user of the public land can indiscriminately construct a road in conjunction with the searching for minerals.

It was brought out at the public hearings that the land management agencies at this time have a very difficult, if not impossible, problem in regulating road construction or trail dozing associated with mineral exploration. It would be in the best interests of fish and wildlife management in the State of Montana if some form of control over this practice were achieved.

The Montana Fish and Game Commission thanks the Committee for the opportunity to comment and stands ready to assist the Committee in any way that it can.



MONTANA WATER RESOURCES BOARD

SAM W. MITCHELL BUILDING

HELENA, MONTANA

59601

GOVERNOR FORREST H. ANDERSON, CHAIRMAN

WILBUR WHITE, VICE CHAIRMAN AND SECRETARY, TWODOT
 HOMER C. BAILEY, CORVALLIS
 CLYDE HAWKS, ST. XAVIER

DOUGLAS G. SMITH, DIRECTOR, HELENA
 EVERETT REDEEN, FORSYTH
 FRED E. BARRETT, CHESTER

October 14, 1970

Dr. S. L. Groff, Executive Secretary
 Governor's Conference
 Montana College of Mineral Science
 and Technology
 Butte, Montana 59701

Dear Sid:

This letter is in reference to the 1970 Governor's Conference on Mined-Land Reclamation and Mining Law held in Helena in the State Senate Chambers on October 5 and 6, 1970. At that meeting, the Montana Water Resources Board presented a statement stating we felt we could administer the Mined-Land Reclamation laws.

We make the statement because of the technical competence we can provide to such an Administrator. We recommend that a qualified individual such as the Director of the Montana Water Resources Board be the Administrator. The Director of the Montana Water Resources Board shall be appointed by the Governor to serve at the pleasure of the Governor or until his successor shall be appointed and shall have qualified. No person shall be appointed Director who has not such theoretical and such practical experience and skill as to qualify him to carry out the duties enjoined him.

We could provide the Administrator with technical assistance since we presently have the following professionals on our staff: Economist, Engineer, Geologist, Landscape Architect, Soil Scientist, and several personnel well versed in surface and ground-water laws.

The Administrator will work closely with the Governor's Council on Natural Resources and Development since the Director of the Montana Water Resources Board is the permanent chairman of the Council. The Council could act as the Advisory Group to the Administrator and all State agencies could be assured of a voice in the area of mined-land reclamation.

We feel we can do the job properly, efficiently, and economically in the way we have recommended above. This is not a grab for power, but rather it is

Dr. S. L. Groff
October 14, 1970
-2-

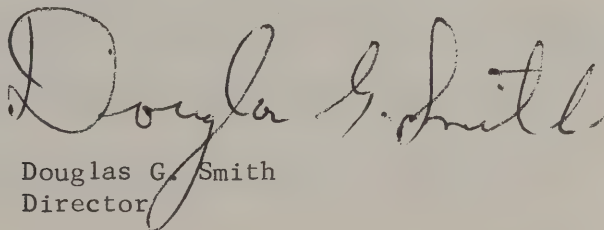
simply a desire to use what we have available in the hope of providing better service to the taxpayers of this State, and we think we must achieve this end.

We feel that removing the administration of mined-land reclamation contracts from the Bureau of Mines would help mitigate public criticism.

We would hope that the Montana Water Resources Board would be given serious consideration on this very important matter.

Sincerely,

MONTANA WATER RESOURCES BOARD

A handwritten signature in cursive script, reading "Douglas G. Smith". The signature is written in dark ink and is positioned above the printed name and title.

Douglas G. Smith
Director

DGS/b

TO: GOVERNOR'S CONFERENCE ON MINED-LAND RECLAMATION
AND MINING LAW

SUBJECT: STATEMENT BY THE ANACONDA COMPANY

DATE: October 20, 1970

The Anaconda Company wishes to compliment the Governor's Conference Committee upon the informative and productive hearings which were held November 7 and 8, 1969, and again on October 5 and 6, 1970. We feel that much was accomplished toward the stated objective of bringing together the mining and conservation interests for an orderly presentation of data and views. It was encouraging to note that there was general agreement upon most of the subject matter covered among the representatives of environmental groups, industry, and government. The small differences appear generally to be concerned with details such as are normally resolved in the legislative process.

As we view the work of the Committee, there were two separate subjects reviewed. 1) The Montana mining law relative to Discovery and assessment work. 2) Laws affecting mined land reclamation.

With respect to the first subject, we refer to the Committee's published recommendations at page 59 and 60 (recommendations I, II and III) as amended by memorandum of October 1 (new recommendations A thru D). We approve of the generally expressed purpose to amend the Montana mining law to eliminate the mandatory location or "discovery" work requirement of physical excavation as found in RCM 50-701. It is this out-

dated requirement which has created the majority of environmental conflicts for the mining industry. However, complete elimination of location work requirements could also have an adverse effect. Some type of location work requirement should be retained to prevent or discourage purely speculative and indiscriminate "blanket" locations which could ultimately have a greater adverse environmental effect. As suggested in the Committee's recommendations, several alternative methods of doing location work should be allowed which would discourage bulldozing yet would still allow the small prospector to locate a claim and to comply with the law. Providing for "group work" upon one claim to hold a specified number of contiguous claims is another technique used successfully in other states (See relevant sections of Arizona, Nevada and California Codes, e.g. Calif. Public Resources Code Sec. 2304) to effectively minimize environmental impact from prospecting.

The Committee's recommendations II and III dealing with annual assessment work are well taken. Montana's present section 50-704 does not require the owner of a mining claim to file an affidavit of performance of annual work. This situation has aggravated title problems in Montana for all parties including agriculture and government as well as the mining industry. This could be corrected quite simply by making the affidavit requirement mandatory and providing that failure to file shall have at least evidentiary effect of a presumption of intent to abandon. We do feel that the deadline for filing should be set at no later than 60 or 90 days following the federal assessment year

(presently Sept. 1) which would put Montana in line with the majority of western mining states. Nevada Revised Statutes, Section 517.230 provides a good example. The Committee's recommendation II to incorporate the federal definition of "labor" for assessment work purposes is a progressive step and will do much to minimize environmental damage. We wholeheartedly support this recommendation.

With respect to the second area of the Committee's work, concerning mined land reclamation, we would make the following observations:

The technical and physical differences between open-pit metallic mining and strip mining of coal and other non-metallics are so great and obvious as to make their incorporation into a single regulatory scheme impossible. Legislation affecting the reclamation of coal and other areally extensive strip-type mining must take into account differences in existing land values, soils, topography, stream drainage, and climate. These differences make it inadvisable to borrow verbatim from legislation passed by other states upon the subject. We feel that Montana's approach to a solution as expressed in the existing 1967 and 1969 acts is the best approach yet devised by any state. Certain aspects of the law do need revision to assure environmental safeguards. These are provided by the Committee's recommendations IV and V as amended by the October 1 memorandum. The basic idea of a flexible contract with administrative discretion placed in the hands of a knowledgeable and experienced administrator is sound. Inflexible

legislative standards or rigid "model contracts", leaving no room for variations in environmental conditions, would serve only to retard responsible and desirable development of our resources.

Specifically, the operator must know in advance what his reclamation costs will be. Reclamation should be geared to land values and physical conditions existing at the time when mining begins and not to some vague or indeterminate future status. Bonding requirements may be necessary to insure compliance, but here again this must be flexible to be workable. The 1969 rules and regulations promulgated by the administrator of the Wyoming Open Cut Reclamation Act provide a model for solution to this problem. The bond is flexible and geared to the cost of reclamation. The Wyoming approach to bonding serves to assure adequate restoration and at the same time does not completely exclude a small operator.

Reclamation standards, if kept reasonable, can be devised to serve the desired goal of protecting the existing environment while at the same time not unduly hindering the responsible operator. The key to this is legislative restraint coupled with an enlightened and positive approach toward environmental safeguards. The recommendations of the Committee thus far reflect the wisdom of a rational attempt to balance the values and interests at stake. If sound and responsible legislation should result it will serve to illustrate that solutions can still be found at the state level.

THE ANACONDA COMPANY

By: R. B. Olson

THE CARTER OIL COMPANY

HOUSTON, TEXAS 77001

C. E. SMITH, JR.
VICE PRESIDENT

October 26, 1970

POST OFFICE BOX 2180

Dr. S. L. Groff
Executive Secretary
Governor's Conference
Montana College of Mineral
Science and Technology
Butte, Montana 59701

Dear Dr. Groff:

Representatives of The Carter Oil Company attended the 1970 Governor's Conference on Mined Land Reclamation and Mining Law, but submitted no recommendation at that time. We now offer suggestions both as to any new legislation and any reclamation contract for which the law may provide. These are aimed at providing a reclamation law which can be effectively and fairly enforced and will achieve a reasonable balance between ecological goals and economic limitations.

Our recommendations are as follows:

1. Recommendation: The goal of the law (and the legislative policy) should be a proper program of reclamation to return mined lands to useful production and to preserve the natural beauty of the State, with due consideration to feasibility based on economic costs, extent of environmental impacts and availability of adequate technology.

Comment: An operator should not be requested, or expected, to reclaim the surface of mined lands to a higher value or use than was the value of the land or the use prior to mining. Also, any reclamation requirement placed on the operator should be one which is clearly within the realm of economic feasibility, from the standpoint of the operator.

2. Recommendation: Reclamation legislation should provide maximum limitations on the requirements which can be imposed upon the mine operator under either the performance bond or reclamation contract, including:

- a. A definition of reasonable value of reclamation work performed, such value being in no event less than money actually spent by the operator.

- b. Limitation of the operator's responsibility to two bona fide attempts of any required seeding or afforestation.
- c. A monetary limitation on the reclamation which may be required, measured by a multiple of the land surface value prior to commencement of mining.
- d. Limitation of the operator's liability for fires to those caused by operator's operations or negligence.

Comment: A mine operator must be able to determine, prior to the commencement of mining operations, the maximum reclamation obligations which can be imposed upon the mining operation. Obviously, it would be impossible for an operator to determine whether the contemplated mining operation would be economically attractive if reclamation requirements could be changed or increased from time to time.

The operator should be credited for the amount which he has actually expended for reclamation. A representative of the State, if the matter were discretionary, might evaluate the reclamation value to be less than the moneys actually expended therefor by the operator. To evaluate the work by results achieved rather than by effort made would place the operator in the position of absolute guarantor. Such a result would be unfair to the operator. The solution lies in a better understanding between the State and the operator, or, perhaps, a well-detailed reclamation plan, but not in refusing to give credit to the operator for the moneys he has actually expended in good faith.

Furthermore, a fair appraisal of results of reclamation work on an individual basis, would require considerable time spent by the State inspector. In a much shorter time the inspector could confirm by inspection of the mine area a reasonable correlation between work results and expenditures reported by the operator.

A mining operator's reclamation obligation must terminate within a reasonable time after mining operations cease, assuming, of course, that the operator has faithfully attempted to comply with his obligation. If seeding or afforestation efforts are unsuccessful after two bona fide attempts, the

operator should be relieved of any further obligation in that regard.

With respect to the monetary limitation, the comments under Recommendation 1 above are applicable.

3. Recommendation: The mine operator should be afforded an effective realization of the tax credit for reclamation work by:

- a. Refunding taxes paid for which the credit is subsequently earned;
- b. Permitting the operator to carry over the tax credit for several years, preferably for the life of the mine;
- c. Permitting the mine operator to apply a tax credit to any State tax obligation, and specifically permitting the operator to apply a tax credit earned on one mine to another mine.

Comment: Under the present law the benefit of the tax credit is largely illusory, and in some cases could be completely so. The tax credit applies only in the year following the reclamation work, but the reclamation work must necessarily follow the mining operation. Assuming only a one-year lag between mining and reclamation, the operator can obtain no effective tax credit for reclamation work done in the last year of mining and that which is done after production ceases. In the case of a long, narrow strip mine with several veins of coal to remove, any refilling of the pit must await the end of all production.

The refunding of taxes paid could be limited to those cases where the reclamation plan provides for a substantial amount of work to be done in the last year of mining operations or later. In such cases, one-half of the taxes paid by the operator would be placed in a special reclamation fund from which the tax refund could be made.

4. Recommendation: Provide for a performance bond the total of which should be a fixed amount per acre of surface mined land (the same throughout the State) multiplied by the number of acres which will be surface mined by the mine operator in a two or three year period of time.

Comment: This is substantially the requirement of existing law with respect to the amount of the bond for a mining permit (\$200 per acre of land to be mined in a three year period). Such a predetermined basis for the bond requirement is necessary for the prospective mine operator to determine the economics of a particular mining project. Otherwise, each operator must confer with the State mining supervisor on the probable bonding requirement for his particular project. Furthermore, such preliminary advice by the State representative could be only tentative by its very nature -- not a binding agreement on the part of the State.

5. Recommendation: The law should provide a means by which the prospective mine operator can be assured, in advance of his commitment to the required investment for a mine, of the maximum reclamation costs which will be required for the mining operation under consideration.

Comment: This might be handled by statutory provision permitting the operator to submit an original reclamation plan, under which the maximum required expenditures would be specified, and to obtain a firm and binding approval thereof, if it is acceptable to state authorities. The final, detailed plan could be required within a specified time after commencement of actual mining operations.

The mining operator must know the expected reclamation costs before he can determine the economic feasibility of any particular project. If the reclamation costs can be increased at the discretion of the state supervisor after the original approval of the reclamation plan, then the mine operator can be placed in an impossible situation. Such limit on expenditures would, of course, not prevent a change in the details of the land reclamation so long as the previously established maximum costs are not exceeded.

6. Recommendation: Do not provide for any non-compliance fine or penalty, but insure that the terms of the performance bond are adequate to fully protect the interests of the State.

Comment: A noncompliance fine is undesirable and unnecessary. The performance bond, properly used, provides ample protection to the State. Its terms should cover timely performance of the various steps of the reclamation work, as well as total performance. On default by the operator for failure to perform the work projected for any particular year,

Dr. S. L. Groff

October 26, 1970

Page.-5

the State should call upon the bonding company to perform. At the same time, the security of the bond having been diminished, a new bond would be required of the operator and his mining operations would be suspended until such additional or new bond was supplied.

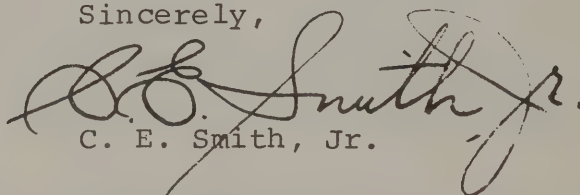
A noncompliance fine would involve a heavy administrative burden on the State in any collection procedure. Also, the State would be met in many cases with a defense of inability to perform by reason of weather conditions or snow cover.

7. Recommendation: The membership of any advisory, review or appeal council should include industry representatives to the extent of one-third of the total membership.

Comment: It is too much to expect that any such council composed entirely of nonindustry representatives would possess the necessary expertise to enable it to fairly, intelligently and competently handle all matters coming before it with a proper balance of the public interest and the interest of the particular mine operator involved. This is true regardless of the good faith and intentions of council members. The industry representatives could provide the necessary expertise to give the council a balanced and well-rounded perspective.

In formulating the foregoing recommendations, we have attempted to give full consideration to the interests of the State, as well as to those of the operators.

Sincerely,


C. E. Smith, Jr.

CES/rb

REGISTRATION LIST

Mons Teigen, Montana Stockgrowers Association, Helena, Montana
Harold Levene, Cameron Engineers, 1315 S. Clarkson Street, Denver, Colorado
R. L. Lindauer, Jr., Humble Oil & Refining Company, P. O. Box 120,
Denver, Colorado
Morgan T. Stanton, Monterey Coal Company, Box 104, Houston, Texas
Paul H. Long, Humble Oil Company, Box 1163, Billings, Montana
Arthur P. Hutchinson, State Bureau, Lee Newspapers, P. O. Box 557,
Helena, Montana
Jay Rooney, Trout Unlimited, Box 417, Elliston, Montana
John Kuglin, Capitol Bureau, Great Falls Tribune, 309 Allen, Helena, Montana
John H. Morrison, Morrison-Maierle Inc., 910 Helena Ave., Helena, Montana
Edwin Zaidlicz, Bureau of Land Management, Billings, Montana
Parker Davies, Bureau of Land Management, Billings, Montana
Uuno M. Sahinen, Montana Bureau of Mines and Geology, Butte, Montana
Winston M. Sahinen, Pacific Power & Light Company, 920 SW 6th Ave.,
Portland, Oregon
Garth A. Duell, Pacific Power & Light Company, 920 SW 6th Ave.,
Portland, Oregon
C. P. Davenport, Pacific Power & Light Company, Portland, Oregon
Seymour S. Bernfeld, American Metal Climax Inc., Denver, Colorado
James R. Mason, Jr., American Metal Climax Inc., Helena, Montana
Stephen P. Collings, American Metal Climax Inc., Helena, Montana
Robert W. Manchester, U. S. Forest Service, Missoula, Montana
Donald Aldrich, Montana Wildlife Federation, 410 Woodworth, Missoula,
Montana
Ray B. Olson, The Anaconda Company, 600 Hennessy Building, Butte, Montana
P. L. MacDonald, The Anaconda Company, Butte, Montana
William P. Mufich, The Anaconda Company, Butte, Montana
C. M. Manette, Pfizer, Inc., P. O. Drawer AD, Victorville, California
Lewis M. McNay, U. S. Bureau of Mines, Washington, D. C.
Arnold J. Silverman, University of Montana, Missoula, Montana
Gary J. Wicks, Governor's Office, Helena, Montana
Mrs. Lyle Johnsrud, Montana Federation of Garden Clubs, Fort Benton, Montana
Michael W. Drazich, U. S. Bureau of Reclamation, Great Falls, Montana
Dean A. Hanson, Chairman, State Soil Conservation Committee, Gildford,
Montana
T. A. Gwynn, Knife River Coal, Bismarck, North Dakota
Lloyd A. Ernst, Basin Electric Power Cooperative, Bismarck, North Dakota
Donald A. Hull, Homestake Mineral Development Company, Spokane,
Washington
John J. Jedlicka, North American Coal Corp., Box 1916, Bismarck, North
Dakota
Ernest E. Thurlow, Burlington Northern Inc., St. Paul, Minnesota
Robert E. Matson, Montana Bureau of Mines and Geology, Butte, Montana
George T. Krempasky, U. S. Bureau of Mines, Helena, Montana

R. G. Garwood, American Exploration & Mining Company, N. 1023 Monroe,
 Spokane, Washington
 E. R. Bohannon, Bureau of Indian Affairs, Billings, Montana
 Myron E. Saltmarsh, Bureau of Indian Affairs, Billings, Montana
 Ronald J. Guse, Montana Water Resources Board, Helena, Montana
 Douglas G. Smith, Montana Water Resources Board, Helena, Montana
 A. H. Klem, Kaiser Cement Company, Montana City, Montana
 J. Lucas, Kaiser Cement Company, Permanente, California
 Jim. E. Richard, Department of Planning and Economic Development,
 Helena, Montana
 Jim Posewitz, Montana Fish & Game Department, Helena, Montana
 Dick Hodder, Montana Agricultural Experiment Station, Bozeman, Montana
 Martin J. Burris, Montana Agricultural Experiment Station, Bozeman, Montana
 Alvin Hageman, Representative District 13, Broadview, Montana
 Mrs. West Donohoe, Montana Farm Bureau, Luther, Montana
 Bill Mackay, Senator District 13, Roscoe, Montana
 Thomas H. Pullen, Union Pacific Railroad, Natural Resources Division,
 Salt Lake City, Utah
 W. P. Schmechel, Western Energy Company, Butte, Montana
 Andrew F. Bateman, Jr., U. S. Geological Survey, Great Falls, Montana
 Don M. Drummond, Office of State Forester, Missoula, Montana
 Gene A. Tuma, Peabody Coal Company, Box 597, Forsyth, Montana
 Robert M. Anderson, Montana Association of Soil & Water Conservation
 District
 Natalie Cannon, Montana Division American Association of University
 Women
 Mrs. Henry G. Bugbee, Legislative Chairman, League of Women Voters
 Jay Rooney, Trout Unlimited, Elliston, Montana
 Robert S. Morgan, U. S. Forest Service, Helena, Montana
 Noel Rosetta, U. S. Forest Service, Helena
 Robert M. Rudio, Mineral Resource Development Inc.
 Norman Rogers, N. Rogers Gold Mining Company
 R. E. Marsh, Ideal Cement Company, P. O. Box 531, Ft. Collins, Colorado
 H. W. Andrews, Ideal Cement Company, Trident, Montana
 Brad W. Durant, Montana-Dakota Utilities, Glendive, Montana
 Perry Weidler, Montana-Dakota Utilities, Glendive, Montana

Montana State Library



3 0864 1007 0203 7

11